NOTE

This Microfiche meets the quality requirements of the American National Standard for Microfiche of Documents (ANSI PH5.9-1975). However, because of imperfections in the document from which it was made, it contains images that are illegible or difficult to read. The source document for this microfiche is the best copy that could be obtained prior to filming.

Congressional Information Service, Inc.
4520 East-West Highway
Bethesda, Maryland 20814

102D CONGRESS
1st Session

COMMITTEE PRINT

WMCP:
102–31

COMMITTEE ON WAYS AND MEANS
U.S. HOUSE OF REPRESENTATIVES

HEALTH CARE RESOURCE BOOK

REVISED DECEMBER 1991

DECEMBER 20, 1991

Prepared for the use of Members of the Committee on Ways and Means by members of its staff. This document has not been officially approved by the Committee and may not reflect the views of its Members

---

U.S. GOVERNMENT PRINTING OFFICE

50–590

WASHINGTON : 1991

For sale by the U.S. Government Printing Office
Superintendent of Documents, Mail Stop: SSOP, Washington, DC 20402-9328
ISBN 0-16-037128-7

H782-56.

COMMITTEE ON WAYS AND MEANS
U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED SECOND CONGRESS
DAN ROSTENKOWSKI, ILLINOIS, *Chairman*

ROBERT J. LEONARD, *Chief Counsel and Staff Director*

This document was prepared by the majority staff of the Committee on Ways and Means and is issued under the authority of Chairman Dan Rostenkowski. This document has not been reviewed or officially approved by the Members of the Committee.

PREFACE

Over the past 30 years, health care spending has grown much faster than spending in the general economy. National health expenditures were $666 billion in 1990, or 12.2 percent of the gross national product (GNP), up from 5.3 percent in 1960. If present trends continue, health spending could reach 15 percent of GNP by the year 2000.

Rising costs have created increasing pressures on both public and private health care financing programs in a time of limited resources. Federal health programs, including Medicare and Medicaid, now account for 14.7 percent of total Federal outlays, and Medicare could surpass Social Security as the largest domestic spending program early in the next century. At the same time, double digit inflation in private health insurance premiums has led many employers to reduce health benefits for workers, while many small employers provide no coverage at all.

An estimated 33.4 million people were uninsured in 1989. Generally, the uninsured are young (under age 24); they are poor; and they have ties to the work force (primarily in small firms, in industries with seasonal or temporary employment, and in firms with a lower skilled or less unionized work force). The proportion of the population without coverage appears to have grown in the last decade. Recent Congresses have sought to address this trend, chiefly through expansions of Federal/State Medicaid coverage for women and children. However, States are arguing that budgetary limits may prevent further such expansions. At the same time, there are concerns that further erosion in the system of work-based coverage could leave many more Americans at risk.

Even insured persons can face substantial health care costs if their insurance does not adequately cover their medical expenses. In 1986, the Department of Health and Human Services estimated that about 10 million persons had insurance that was inadequate to protect them from the risk of an extraordinary illness expense. Private sector health plans and public programs (Medicare and Medicaid) may all, to some degree, leave their enrollees underinsured because of cost-sharing requirements, limits on payment to providers, or uncovered services. The potential exposure of the insured to financial losses may increase as public and private programs reduce benefits in an effort to stem cost increases.

The 102d Congress is considering a variety of measures to address the problems of access and cost. Options to cover the uninsured include mandatory employer-based coverage, expansion of Medicare or Medicaid, and tax credits or other assistance for purchasers of insurance. There are also proposals to make coverage more available through reform of the private insurance market and to improve access to services offered under Public Health Service Act programs. A variety of cost containment approaches are also under consideration. These include measures to limit the favorable tax treatment for health benefits, to reform the malpractice liability system, and to promote the use of managed health care systems.

This chartbook outlines some of the data associated with these issues. It was prepared by a team of Congressional Research Service and Congressional Budget Office analysts including: Janet Kline, Mark Merlis, Kathleen King, and Richard Rimkunas of CRS and Kathryn Langwell, Carla Pedone, Julia Jacobson, and Eric Guille of CBO. I would like to thank all those involved in preparing this document for their efforts and their continuing assistance to the Committee on Ways and Means.

DAN ROSTENKOWSKI.

CONTENTS

LIST OF FIGURES

HEALTH CARE EXPENDITURES

Page

Figure 1. National health expenditures as a share of the GNP, 1960–1990 2
Figure 2. National health expenditures, 1960–1990 4
Figure 3. Actual and estimated national health expenditures, in constant 1989 dollars, 1960–2000 6
Figure 4. Federal health spending as a share of Federal expenditures, 1960–1989 8
Figure 5. State and local health spending as a share of State and local expenditures, 1960–1989 10
Figure 6. Real per capita health expenditures, U.S. and selected countries, 1965–1987 12
Figure 7. Health expenditures as a percentage of gross domestic product, U.S. and selected countries, 1965–1989 14
Figure 8. National health spending by type of payer, 1990 16
Figure 9. Distribution of health spending by payer, 1965–1987 18
Figure 10. National health expenditures by type of expenditure, 1990 20
Figure 11. Personal health care spending, 1990 22
Figure 12. Spending trends for inpatient and outpatient hospital, physician and nursing home services, 1960–1990 24
Figure 13. Spending trends for inpatient and outpatient hospital, physician and nursing home services, in constant 1990 dollars, 1960–1990 26
Figure 14. Factors contributing to the 1989–1990 increase in health spending 28
Figure 15. Spending trend for inpatient and outpatient hospital care services, 1960–1990 30
Figure 16. Spending trend for inpatient and outpatient hospital care services in constant 1990 dollars, 1960–1990 32
Figure 17. Spending on inpatient and outpatient hospital care as a share of total health spending, 1960–1990 34
Figure 18. Hospital margins based on total revenues, 1965–1990 36
Figure 19. Selected sources of payment for hospital spending, 1960–1989 38
Figure 20. Trends in outpatient visits and inpatient days, short-term general and other special hospitals, 1965–1989 40
Figure 21. Spending trends for physician services, 1960–1990 42
Figure 22. Spending trends for physician services, in constant 1990 dollars, 1960–1990 44
Figure 23. Spending for physician services as a share of total health spending, 1960–1990 46
Figure 24. Selected sources of payment for physician services, 1960–1989 48
Figure 25. Average real physician income, U.S. and selected countries, 1965–1987 50
Figure 26. Ratio of average income of physicians to average compensation of all employees, U.S. and selected countries, 1965–1987 52
Figure 27. Spending trends for nursing home services, 1960–1990 54
Figure 28. Spending trends for nursing home services, in constant 1990 dollars, 1960–1990 56
Figure 29. Spending for nursing home services as a share of total health spending, 1960–1990 58
Figure 30. Comparison of the share of nursing home spending paid for by selected payers in 1960, 1980 and 1988 60
Figure 31. Real per capita national expenditures and per enrollee Medicare expenditures for health, 1965–1989 62
Figure 32. Average annual growth rates of real national and Medicare expenditures for health, total and per capita, 1970–1989 64

Page

Figure 33. Average annual growth rates of real national and Medicare expenditures for hospital and physician services, total and per capita, 1970–1989 66
Figure 34. Selected components of the Federal budget, 1970–1996 (in percent) 68
Figure 35. Average annual rates of growth of real Federal outlays, selected components, 1970–1996 70
Figure 36. Average annual growth rates of real Medicare spending per enrollee, by component, 1975–1996 72

HEALTH INSURANCE

Figure 37. Primary sources of health coverage for persons under age 65, 1989 76
Figure 38. Primary sources of health coverage, persons in poverty, 1989 78
Figure 39. Primary sources of health coverage for children under age 18, 1989 80
Figure 40. Population without health coverage by age, 1989 82
Figure 41. Population without health coverage by income, 1989 84
Figure 42. Population without health coverage by ties to work force, 1989 86
Figure 43. Rate of health insurance coverage by age, 1989 88
Figure 44. Rate of health insurance coverage by income, 1989 90
Figure 45. Rate of health insurance coverage by size of employer, 1989 92
Figure 46. Rate of health insurance coverage by type of industry, 1989 94
Figure 47. Sources of health care coverage, persons age 65 and over, 1989 96
Figure 48. Insurance funding arrangement by firm size, 1990 98
Figure 49. Percent of firms using alternate delivery models, 1989 100
Figure 50. Increase in average health insurance premium, 1982–90 102
Figure 51. Administrative costs as a percent of benefits, various programs, 1987 104
Figure 52. Administrative costs as a percent of benefit costs by size of firm 106
Figure 53. Typical age/sex premium range, plan with average value of $1,000 108

ACCESS AND OUTCOMES

Figure 54. Average number of physician contacts by age and insured status, 1986 112
Figure 55. Average number of hospital days by age and insured status, 1986 114
Figure 56. Real uncompensated and unsponsored care provided by hospitals, 1980–1989 116
Figure 57. Infant mortality rates in selected countries, 1988 118
Figure 58. Life expectancy at birth by race and sex, U.S., 1900–1988 120
Figure 59. Death rates for selected causes of death by race and sex, 1987 122

LIST OF TABLES

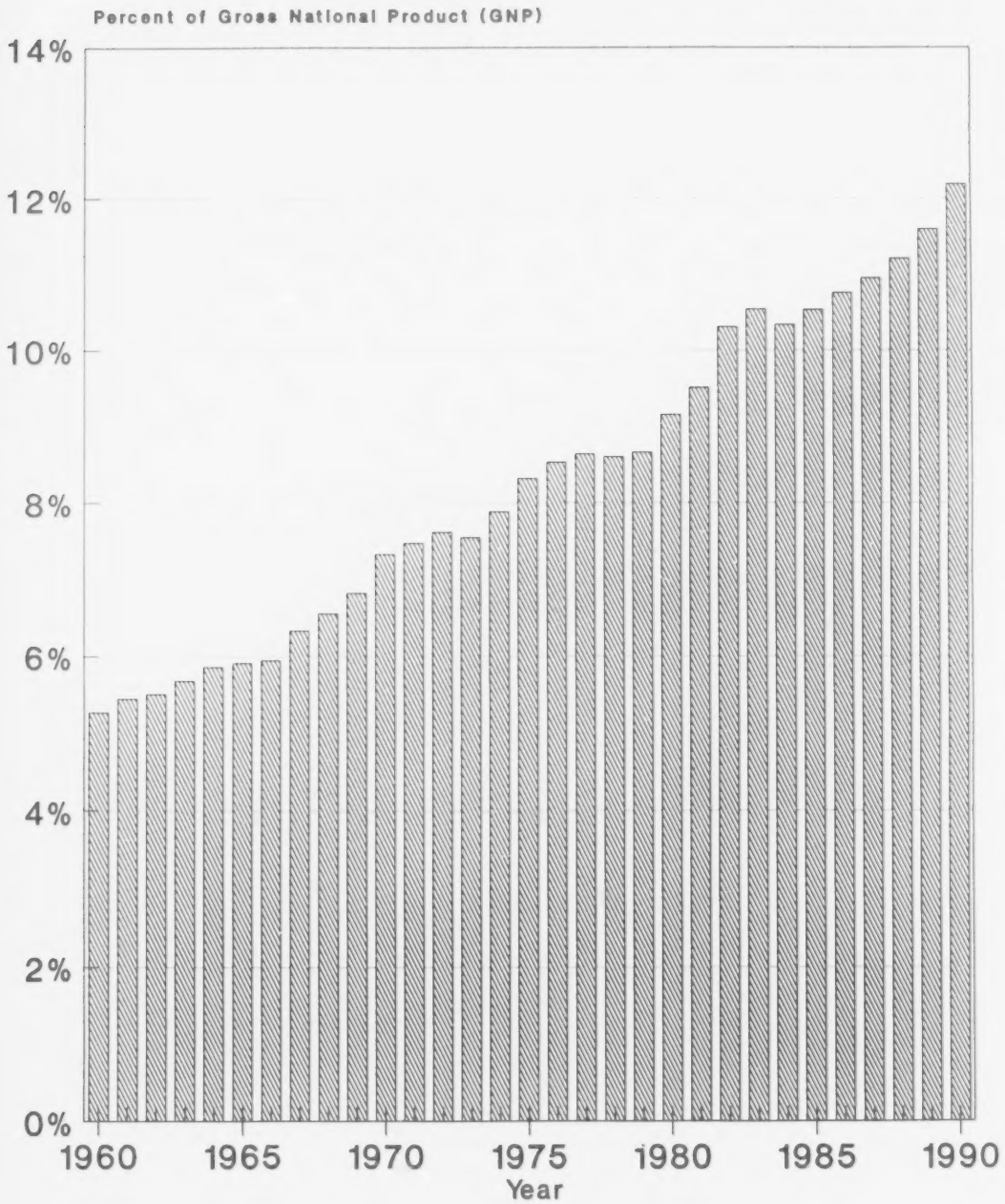
Table 1. Selected measures of national health expenditures, 1980–1989 124
Table 2. Trends in the hospital market, 1965–1989 126

Health Care Expenditures

Figure 1. National Health Expenditures as a Share of the Gross National Product, 1960 - 1990

In 1960, national health care spending accounted for 5.3 percent of the gross national product (GNP). By 1980, it consumed 9.2 percent of the GNP. In 1990, health spending accounted for 12.2 percent of the GNP, up from 11.6 percent in 1989. The 1990 increase in spending marks the sixth consecutive year that health spending grew faster than the overall economy.

Figure 1. National Health Expenditures as a Share of the Gross National Product, 1960 to 1990

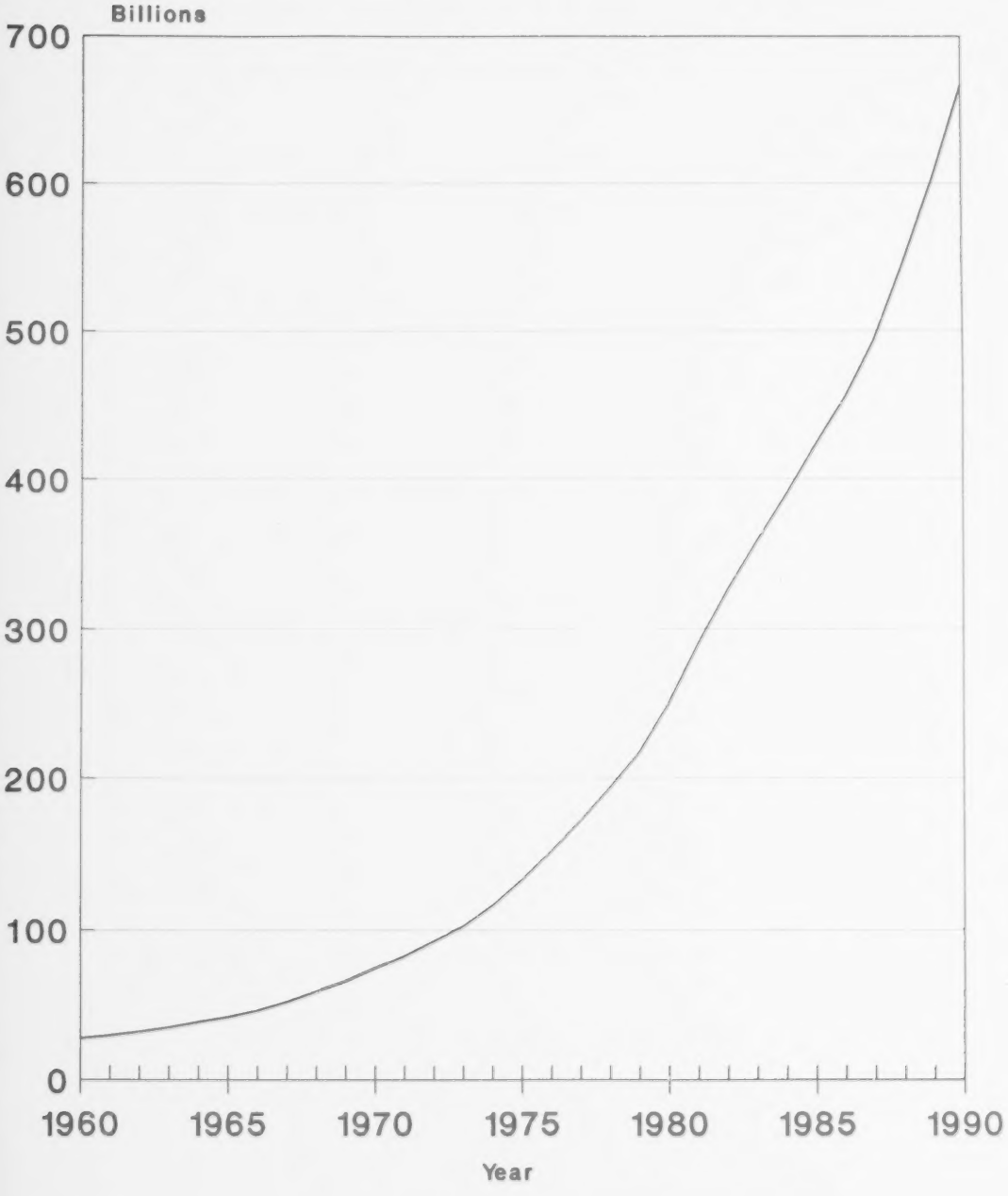


Source: CRS analysis of National Health Expenditure data.

Figure 2. National Health Expenditures, 1960 - 1990

National spending on health care was $27.1 billion in 1960 and $250.1 billion in 1980. In 1990, national health care expenditures were $666.2 billion. Health care spending grew rapidly in the early 1980's, with annual growth rates exceeding 15 percent in both 1980 and 1981. Growth rates were more moderate in the mid- 1980's, but have accelerated again since 1986. The rate of growth was 10.4 percent in 1989 and 10.5 percent in 1990.

Figure 2: National Health Expenditures, 1960 to 1990

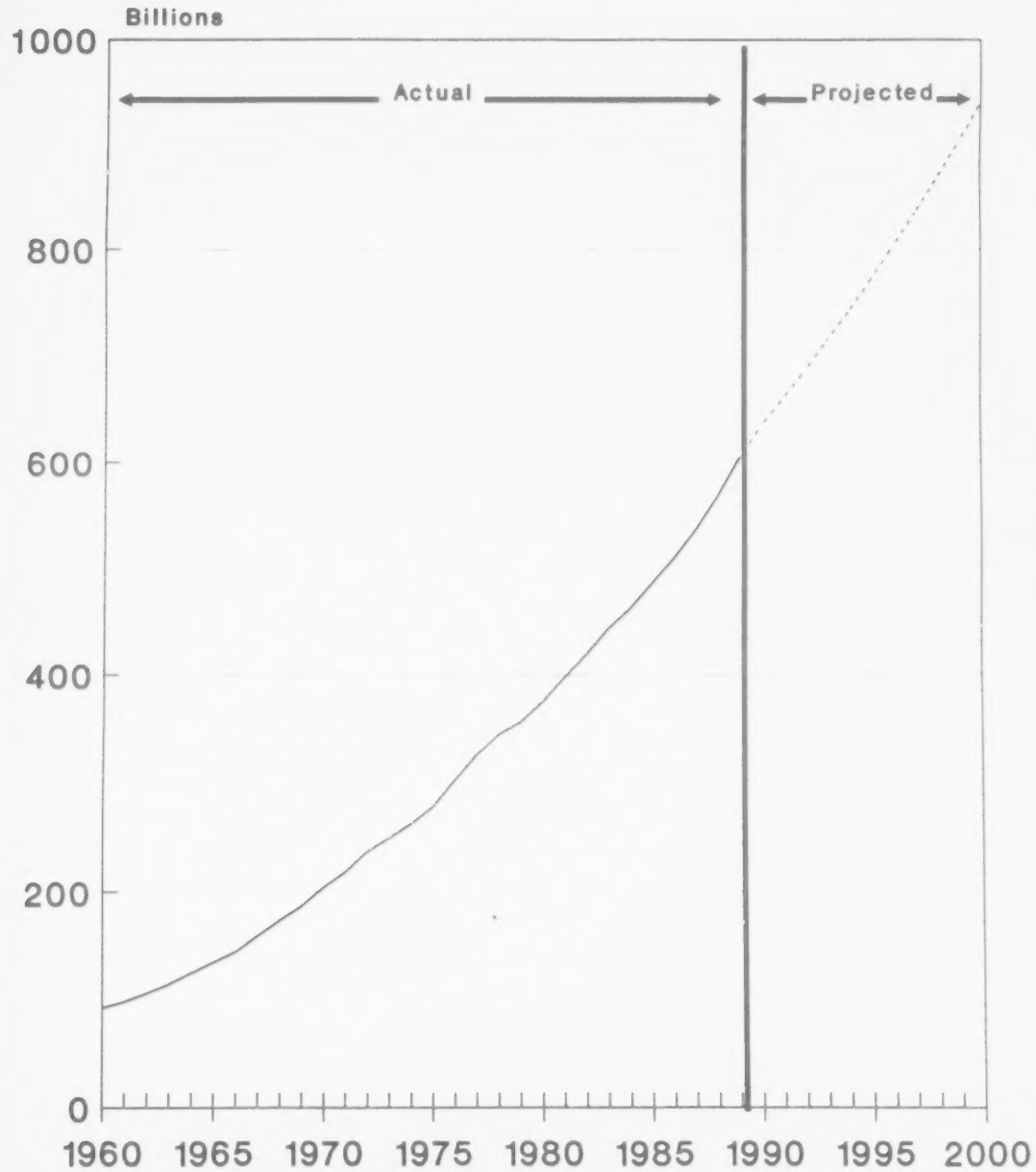


Source: CRS analysis of National Health Expenditure data.

Figure 3. Actual and Estimated National Health Expenditures in Constant 1989 Dollars, 1960 - 2000

Adjusting for inflation, national health expenditures rose at an average annual rate of 6.7 percent from 1960 - 1989. From 1985 through 1989, real spending grew an average of 5.6 percent a year. Based on a Macroeconomic Demographic Model developed by the National Institute of Aging, real health care spending is projected to increase 5.1 percent between 1989 and 1990, and 4 percent a year from 1990 to 2000.

Figure 3: Actual and Estimated National Health Expenditures in Constant 1989 Dollars, 1960 to 2000



Source: CRS analysis of actual data based on National Health Expenditure data. Committee on Ways and Means staff projections for 1990 to 2000. These projections assume a 5.1% increase between 1989 and 1990, and a 4% average annual increase between 1990 and 2000.

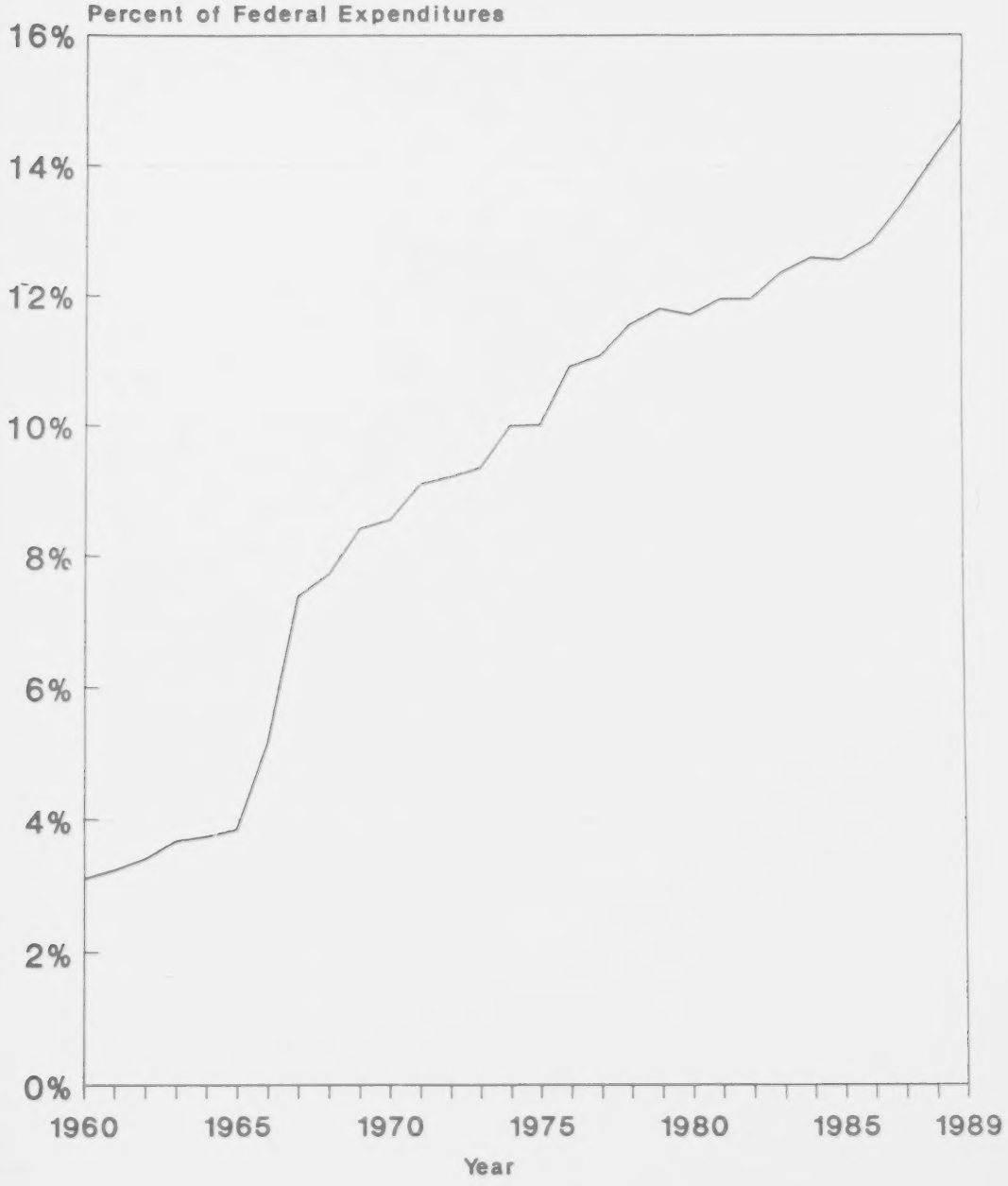
Figure 4. Federal Health Spending as a Share of Federal Expenditures, 1960 -1989

In 1960, Federal health expenditures were $2.9 billion, or 3.1 percent of total Federal expenditures.[1] In 1980, Federal health spending was $72.0 billion, or 11.7 percent of total Federal spending. In 1989, Federal health expenditures (about 60 percent of which were for Medicare) accounted for 14.7 percent of all Federal spending.

---

[1]Federal expenditure data used in this chart are from the National Income Product Accounts (NIPA) prepared by the Department of Commerce. The NIPA expenditure data differ somewhat from Federal budget outlays. The NIPA data record Medicare Part B premium payments by beneficiaries as Government receipts, while the Federal budget subtracts these payments from Medicare outlays. The NIPA also employs different accounting methods than Federal budget outlays.

Figure 4: Federal Health Spending as a Share of Federal Expenditures, 1960 to 1989

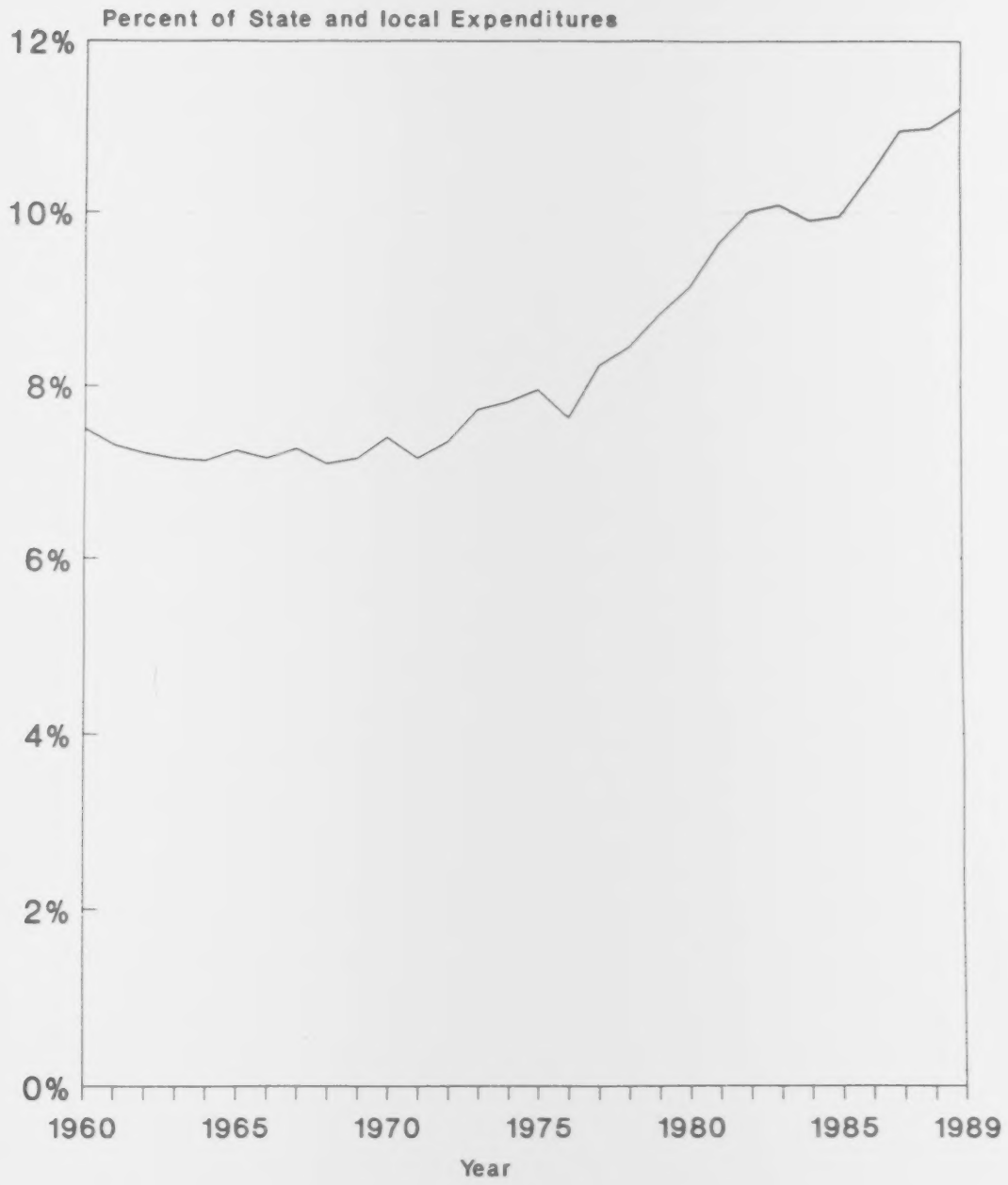


Source: CRS analysis of National Health Expenditure data.

Figure 5. State and Local Health Spending as a Share of State and Local Expenditures, 1960-1989

The trend in State and local health spending is similar to the trend in Federal health spending, but not as pronounced. In 1960, State and local government health expenditures were $3.7 billion, or 7.5 percent of total State and local government expenditures. In 1980, health spending by State and local governments was $33.2 billion, or 9.1 percent of total State and local spending. In 1989, 11.2 percent of all State and local expenditures were for health care. The single largest component of State and local health spending is Medicaid.

Figure 5: State and Local Health Spending as a Share of State and Local Expenditures, 1960 to 1989



Source: CRS analysis of National Health Expenditure data.

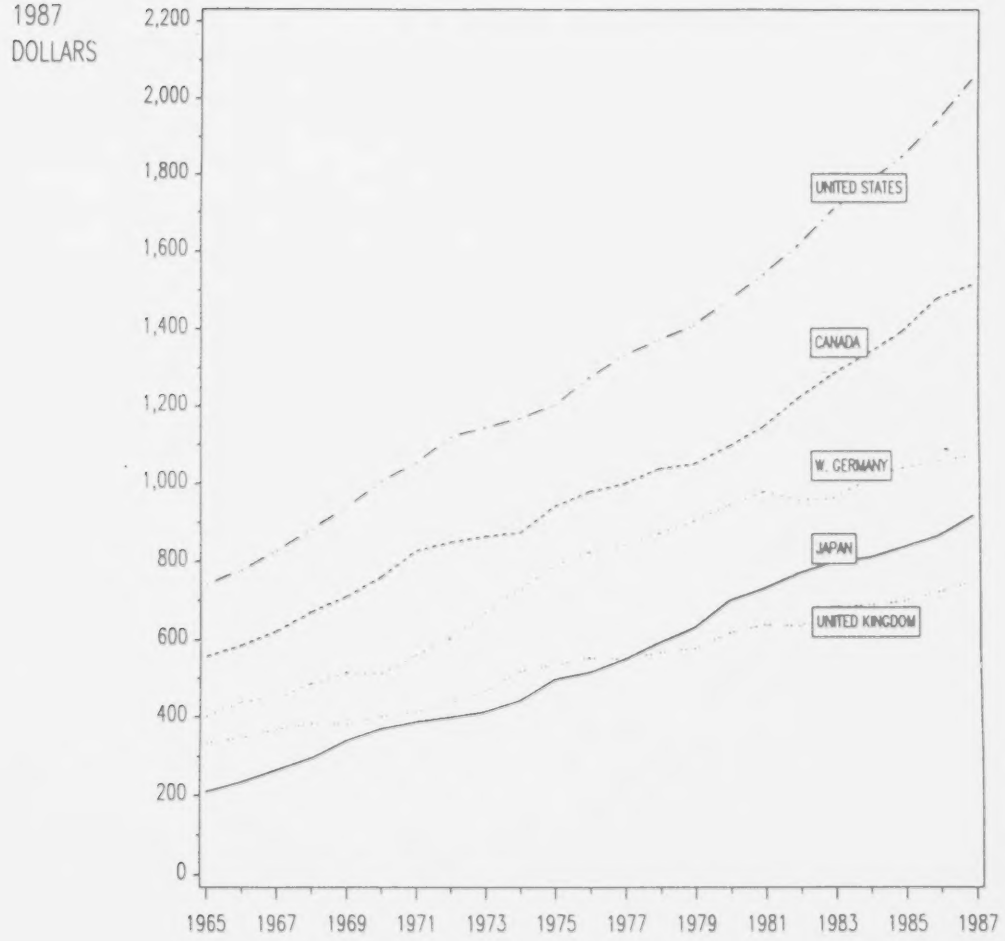
Figure 6. Real Per Capita Health Expenditures, United States and Selected Countries, 1965 - 1987

From 1965 through 1987, real per capita spending on health care in the United States was consistently higher than in other countries. In 1965, real per capita spending on health care was $742, (in 1987 constant dollars) compared to $557 in Canada, $402 in West Germany, $209 in Japan and $335 in the United Kingdom. In 1987, real spending per capita was $2,051 in the U.S., $1,515 in Canada, $1,073 in West Germany, $917 in Japan, and $751 in the United Kingdom.

Despite the differential between spending in the U.S. and other countries, the rate of growth in health spending has been substantial in all countries. U.S. per capita spending rose by 176 percent during this period, which is comparable to the 167 percent increase in West Germany, and 172 percent increase in Canada. Japan experienced a considerably higher rate of growth--339 percent.

During the 1980-87 period, per capita spending continued to rise rapidly in the United States, Canada and Japan, at 39 percent, 38 percent and 31 percent respectively. In West Germany, however, the rate of growth dropped to only 13 percent.

FIGURE 6. REAL PER CAPITA HEALTH EXPENDITURES, UNITED STATES AND SELECTED COUNTRIES, 1965–1987



SOURCE: Congressional Budget Office calculations based on data from the Organization for Economic Cooperation and Development, Health Data File, 1989, as reported in Health Care Financing Review, 1989 Annual Supplement.

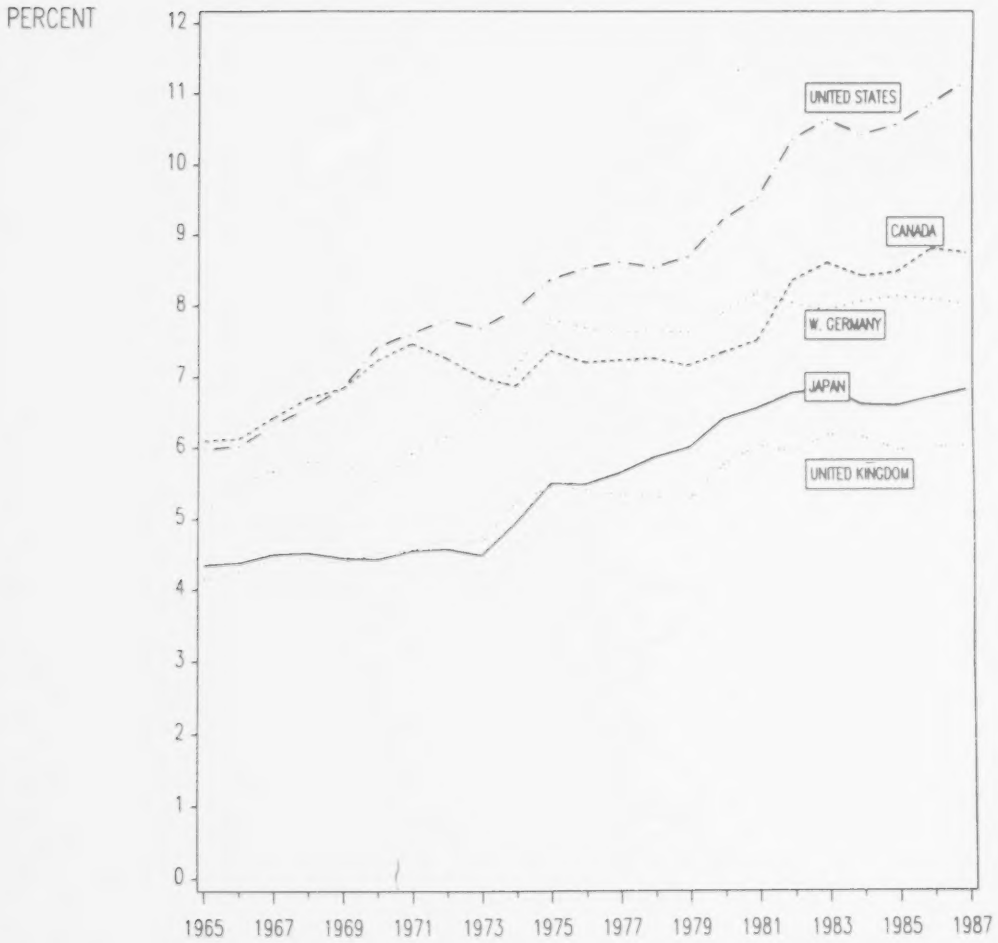
NOTES: Expenditures in different countries were expressed in a common currency (U.S. dollars) using OECD estimates of a "purchasing power parity"(PPP) rate of exchange between national currencies. PPP is an estimate of the exchange rate at which a dollar can buy the same basket of goods in each country.

Nominal currency values have been converted to 1987 dollars using the GDP deflator, because the GNP fixed-weighted deflator is not available for other countries.

Figure 7. Health Expenditures as a Percentage of Gross Domestic Product, United States and Selected Countries, 1965-1987

In 1965, the United States spent 6.0 percent of its gross domestic product on health care (GDP), compared to 6.1 percent in Canada, 5.1 percent in West Germany, 4.3 percent in Japan, and 4.2 percent in the United Kingdom. Since that time, U.S. health spending, as a percent of the GDP, has grown faster than in these countries. In 1987, the latest year for which international comparisons of health spending are available, the U.S. spent 11.2 percent of its GDP on health care, compared to 8.8 percent in Canada, 8.1 percent in West Germany, 6.8 percent in Japan, and 6.1 percent in the United Kingdom.

FIGURE 7. HEALTH EXPENDITURES AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT, UNITED STATES AND SELECTED COUNTRIES, 1965–1987



SOURCE: Congressional Budget Office calculations based on data from the Organization for Economic Cooperation and Development, Health Data File, 1989, as reported in Health Care Financing Review, 1989 Annual Supplement.

NOTE: Gross Domestic Product is equal to Gross National Product less net property income from abroad. Use of GDP for international comparisons of health spending eliminates variations due to the fact that countries differ in the role of foreign transactions in their economies.

Figure 8. National Health Spending, by Type of Payer, 1990

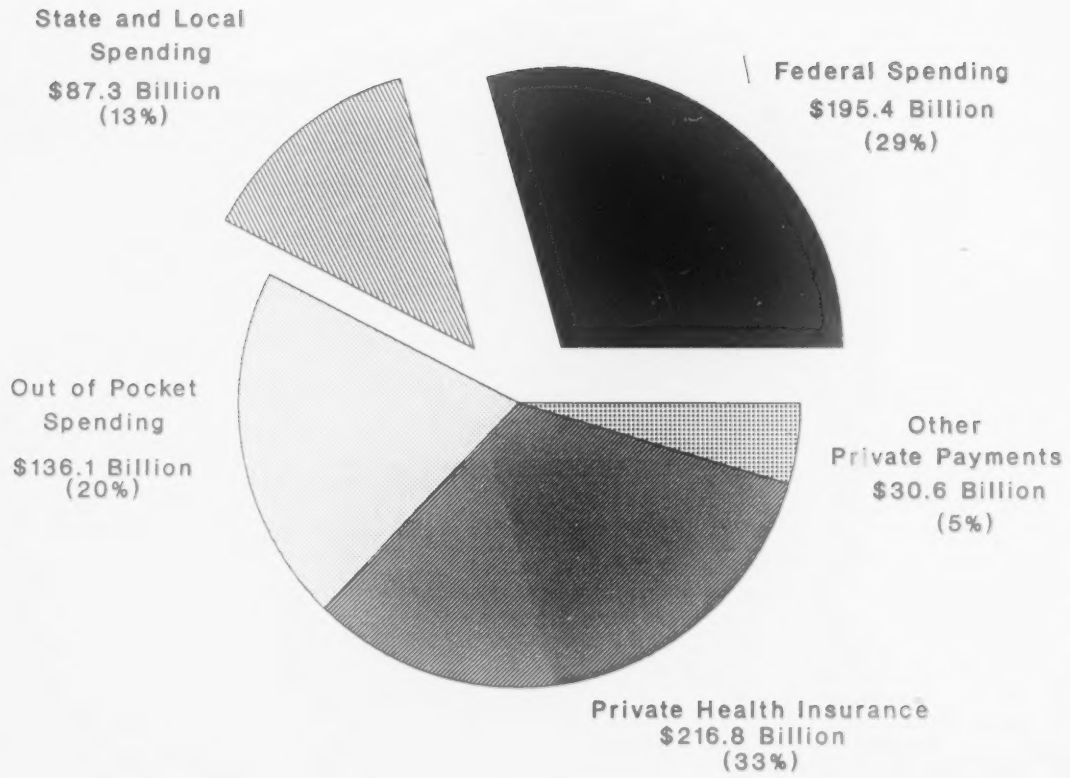
In 1990, private sector payments accounted for 58 percent of national health expenditures. Private sector payments consist of:

- private health insurance payments, which include spending by business for health insurance premiums and consumer spending for private health insurance premiums, which are typically incurred as payroll deductions (33 percent);
- out-of-pocket spending by consumers (20 percent); and
- other private payments, which includes philanthropy, non-patient sources of revenue and investment income (5 percent).

The Federal government financed 29 percent of national health spending in 1990. Most Federal health spending is for Medicare, but the Federal government also finances health care in many other forms, such as Medicaid; health care provided through the Veterans Administration and the Department of Defense; and the Public Health Service.

State and local governments financed 13 percent of national health spending in 1990. The largest component of State and local spending is for Medicaid; many State and local governments also finance health services for indigent individuals not eligible for Medicaid.

Figure 8: National Health Spending, by Type of Payer, 1990



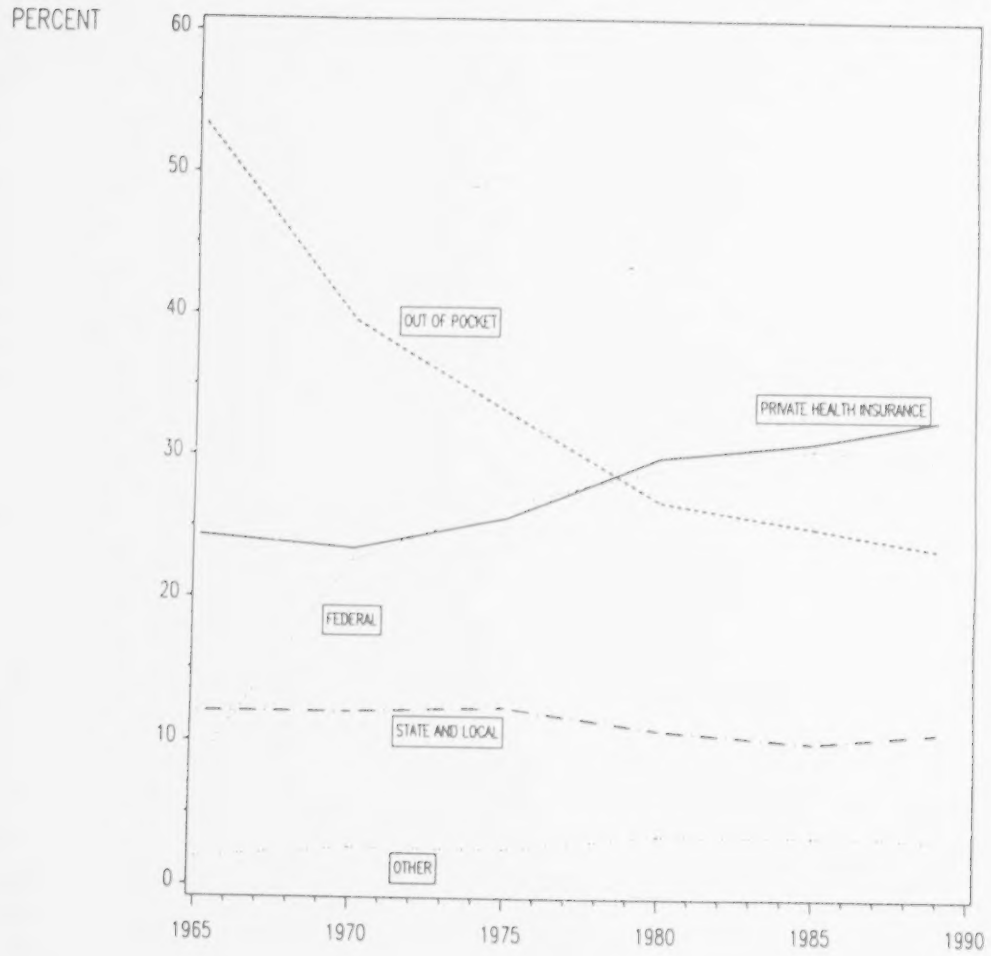
Source: CRS analysis of National Health Expenditure data.

Figure 9. Distribution of Health Spending by Payer, 1965 - 1989

The sources of payment for health care have changed substantially since 1965. In 1965, the Federal government paid for 8.3 percent of personal health care. The Federal role in funding health care increased dramatically with the implementation of Medicare and Medicaid, rising to 22.6 percent of personal health care spending. Federal spending continued to rise until around 1980, when it reached 30 percent. It has been very stable since that time; it 1989, Federal spending comprised 29.8 percent of personal health spending.

Private health insurance spending, which includes employee's contribution to health insurance premiums, rose moderately from 1965 to 1989, from 24.3 percent of spending in 1965 to 32.6 percent in 1989. Out-of-pocket spending by consumers fell sharply from 53.4 percent in 1965 to 39.5 percent in 1970, and continued falling, as a share of all personal health spending. In 1989, out-of-pocket spending comprised 23.5 percent of the total. State and local spending fell very slightly, from 12.0 percent in 1965 to 10.7 in 1989.

FIGURE 9. DISTRIBUTION OF PERSONAL HEALTH CARE EXPENDITURES BY SOURCE OF PAYMENT, 1965–1989



SOURCE: Congressional Budget Office calculations based on data from the Health Care Financing Administration, Office of the Actuary, 1991.

NOTES: Personal health care expenditures are equal to national health expenditures less spending for research, construction, and administrative costs.

The "Other" category includes philanthropy and industrial in-plant spending for health.

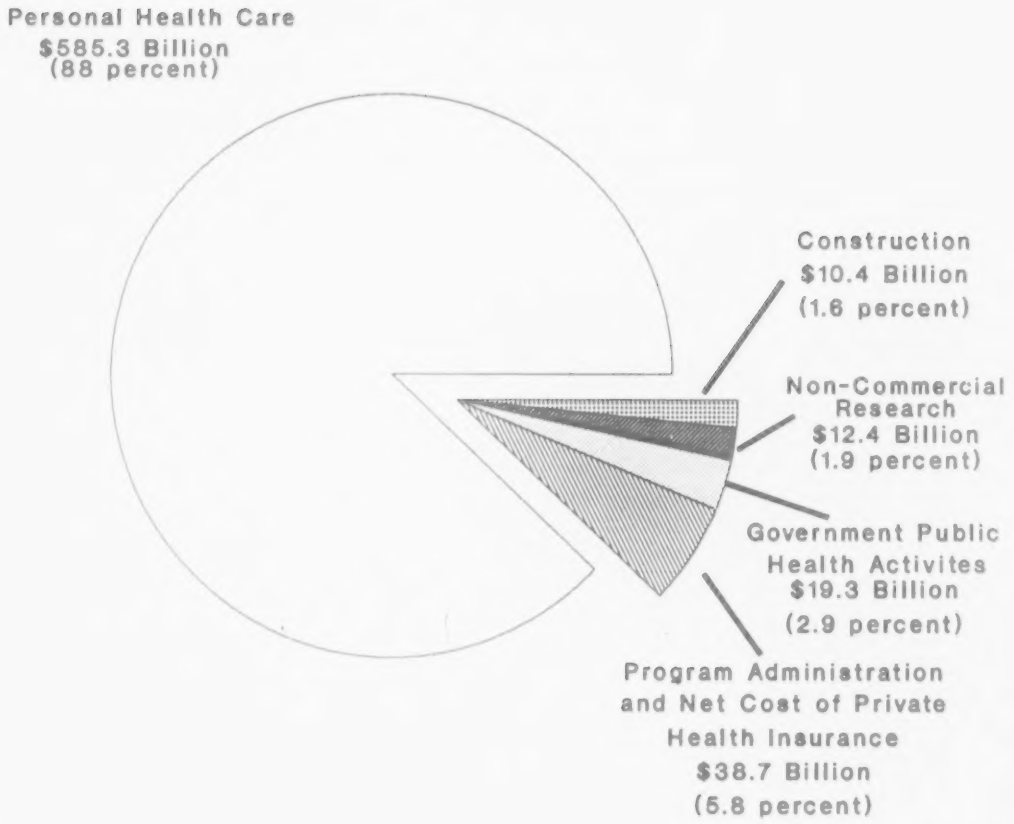
Figure 10. National Health Expenditures, by Type of Expenditure, 1990

Most health care spending is for personal health care provided to individuals. In 1990, personal health care spending accounted for 88 percent of national health expenditures. The remaining 12 percent was expended on the following:

- 5.8 percent on program administration and the net cost of private health insurance (which includes profits earned by private health insurance companies);
- 2.9 percent on government public health activities;
- 1.9 percent for non-commercial health research; and
- 1.6 percent on construction of health care facilities.

Figure 10: National Health Expenditures, by Type of Expenditures, 1990

Total Expenditures = $666.2 Billion



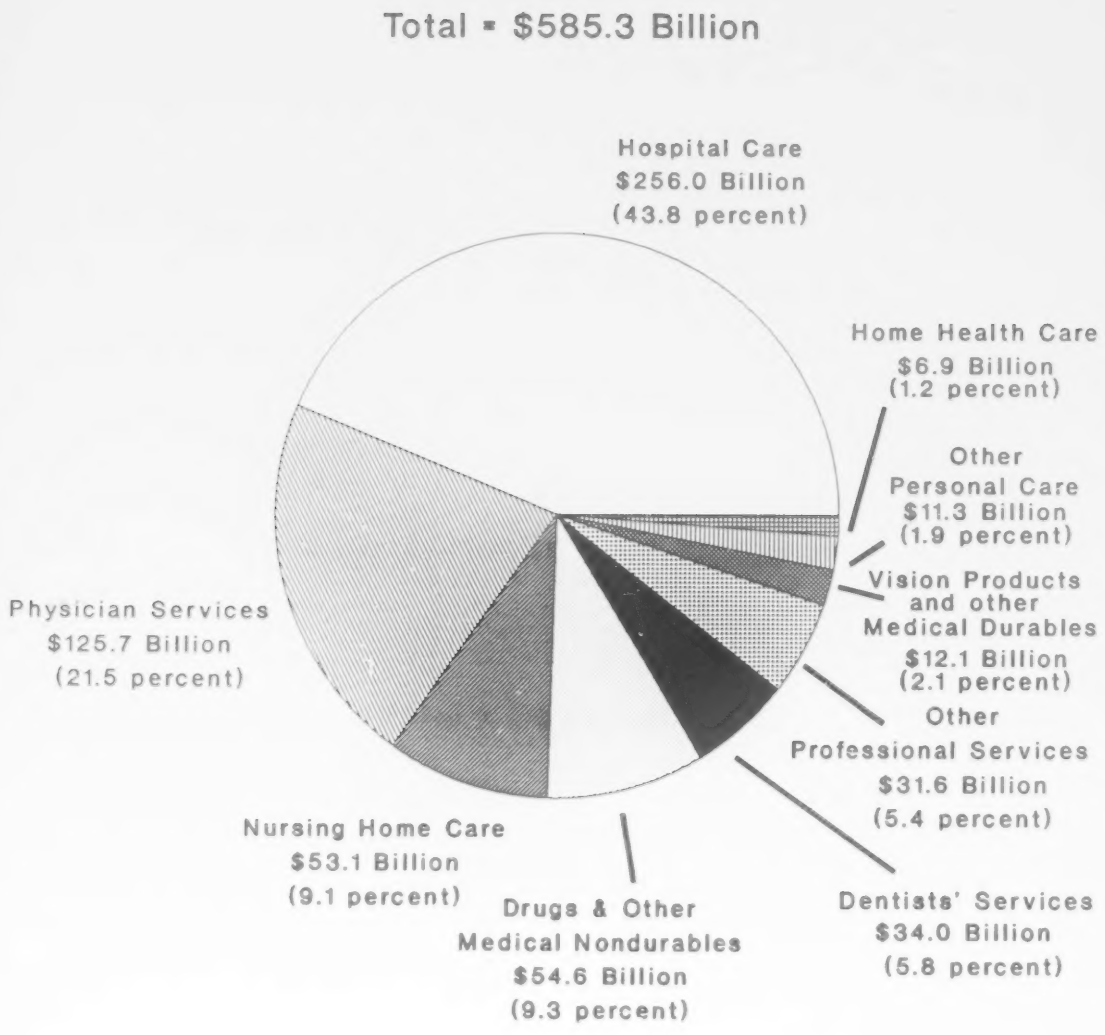
Source: CRS analysis of National Health Expenditure data.

Figure 11. Personal Health Care Spending, 1990

Three services (hospital care, physicians' services and nursing home care) comprise the bulk of personal health care spending. In 1990, these services accounted for 74 percent of all personal health care spending. Hospital care (including both inpatient and outpatient care) accounted for almost 44 percent of personal health care services in 1990, compared to 21.5 percent for physicians' services, and 9.1 percent for nursing home care. Figure 11 displays these and other components of personal health spending in 1990, as follows:

- 9.3 percent on drugs and other medical non-durables, which includes prescription and non-prescription drugs and medical supplies such as bandages and heating pads;
- 5.8 percent on dentists' services, which includes services rendered by dentists and dental labs;
- 5.4 percent on other professional services, which includes services of private duty nurses, chiropractors, podiatrists, optometrists and other non-physician provider health services;
- 2.1 percent on vision products and other medical durables, which includes eyeglasses, contact lenses, hearing aids, and durable medical supplies such as wheelchairs;
- 1.9 percent on other personal care, which includes employer-provided health care services and facilities; and
- 1.2 percent on home health care, which includes skilled nursing or other medical care provided in patients' homes.

Figure 11: Personal Health Care Spending, 1990



Source: CRS analysis of National Health Expenditure data.

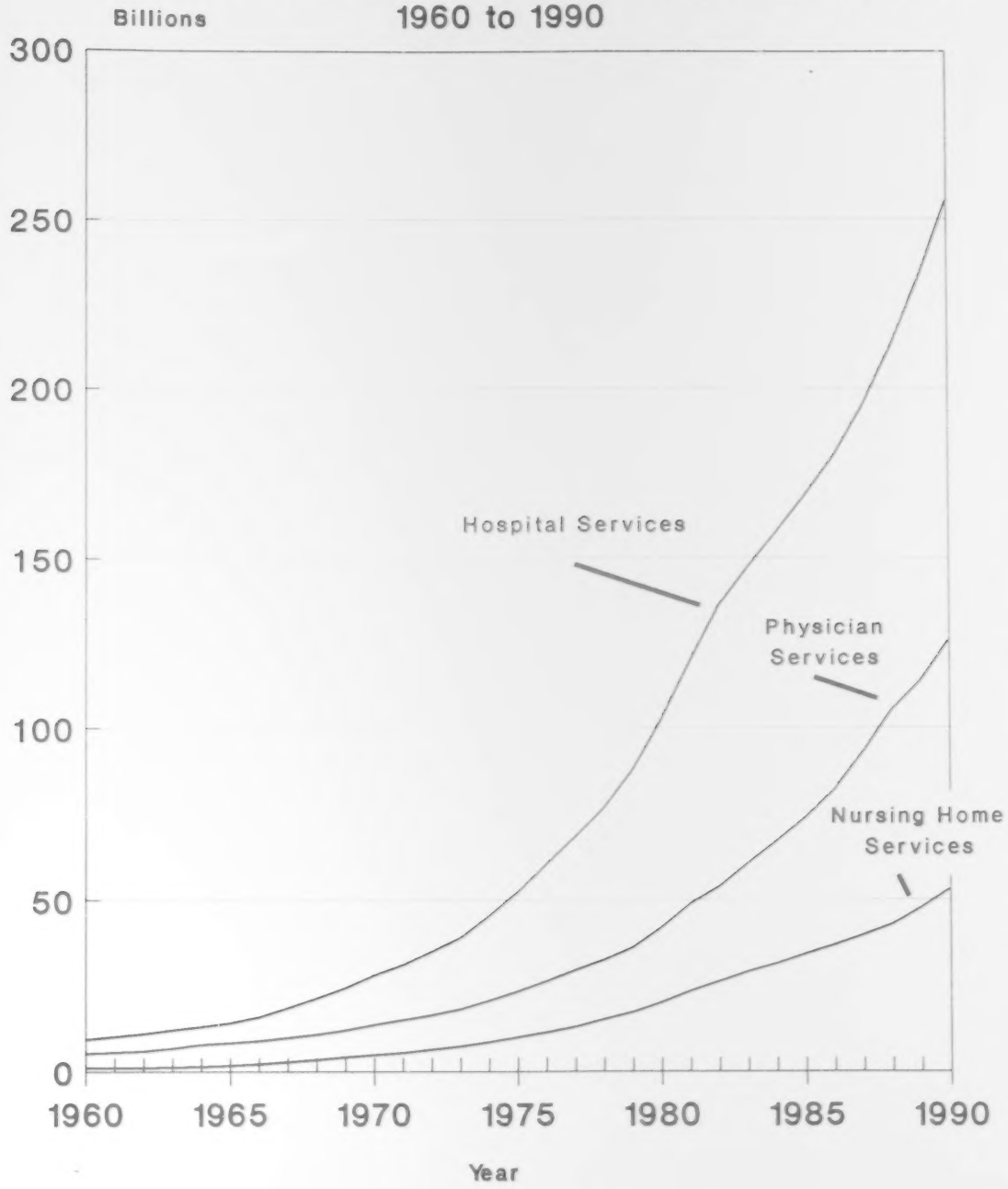
Figure 12. Spending Trends for Inpatient and Outpatient Hospital, Physician and Nursing Home Services, 1960-1990

Spending on hospital care rose from $9.3 billion in 1960 to $256.0 billion in 1990, rising at an average annual rate of 11.8 percent during these years. Hospital spending grew 9.7 percent in 1989 and 10.1 percent in 1990.

Spending on physicians' services was $5.3 billion in 1960 and $125.7 billion in 1990, rising at an average annual rate of 11.1 percent during these years. It rose over 13 percent in both 1987 and 1988, and nearly 11 percent in 1990.

Spending on nursing home services rose from $980 million in 1960 to $53.1 billion in 1990, rising at an average annual rate of 14.2 percent. In 1989 and 1990 nursing home expenditures grew 11.5 and 11.4 percent, respectively.

Figure 12: Spending Trends for Inpatient and Outpatient Hospital, Physician and Nursing Home Services, 1960 to 1990



Source: CRS analysis of National Health Expenditure data.

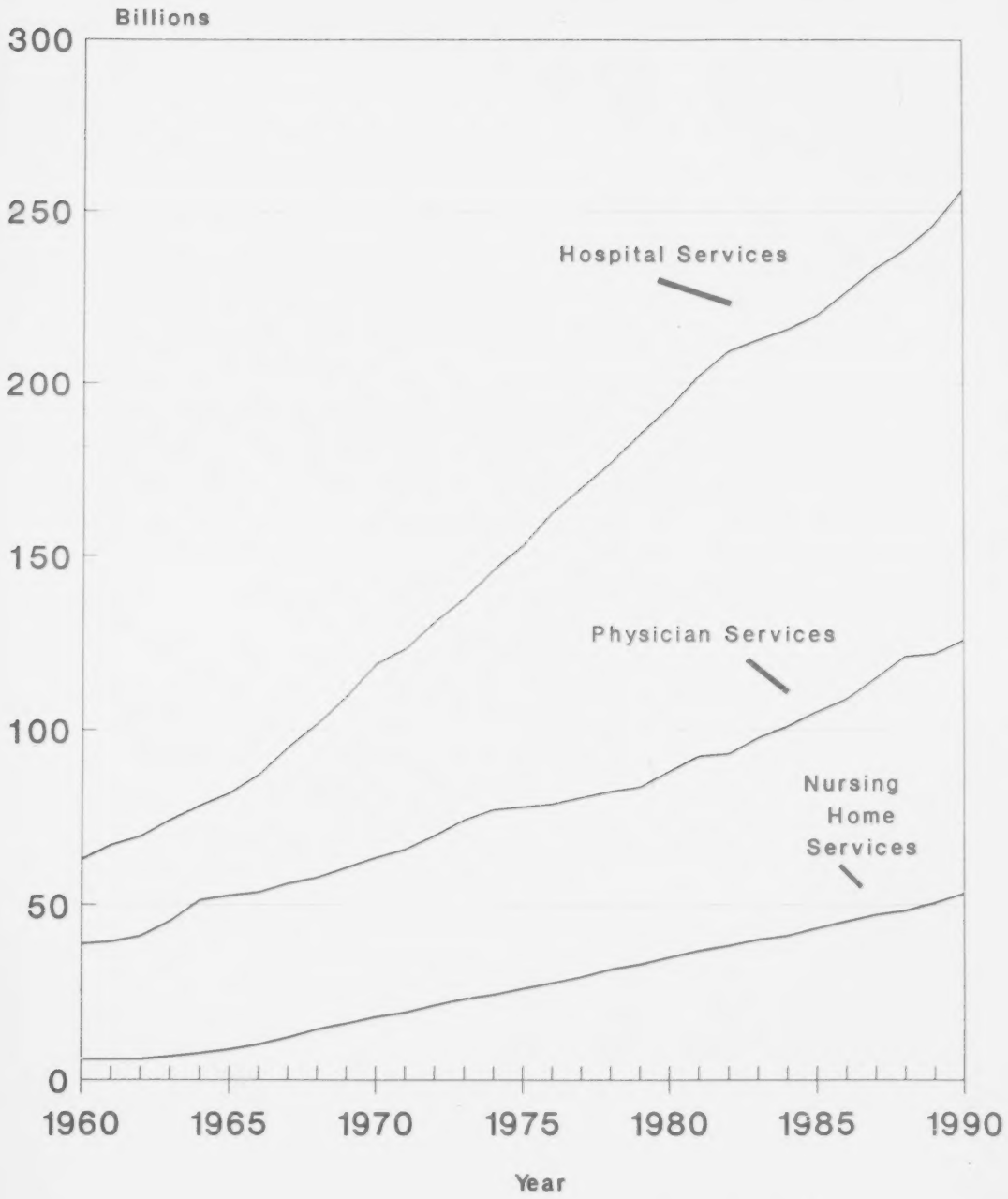
Figure 13. Spending Trends for Inpatient and Outpatient Hospital, Physician, and Nursing Home Services in Constant 1990 Dollars, 1960-1990

Real spending on hospital services rose an average of 4.8 percent a year from 1960 through 1990. From 1980 - 1985, real spending rose an average of 2.6 percent a year. However, the rate of growth has accelerated again since 1985, averaging 3.1 percent. In 1990, real spending on hospital services rose 4.3 percent.

Real spending on physicians' services rose an average of 4.0 percent a year from 1960 through 1990. The real rate of increase in spending for physicians' services rose at an annual rate of 3.6 percent from 1980 through 1990. In 1990, real spending for physicians' services rose 3.2 percent.

Real spending on nursing home services rose an average of 7.6 percent a year from 1960 through 1990. From 1980 - 1985, real spending on nursing home care rose an average of 4.4 percent a year. From 1985 - 1990, it rose an average of 4.1 percent a year. In 1990, it rose 5.4 percent.

Figure 13: Spending Trends for Inpatient and Outpatient Hospital, Physician, and Nursing Home Services in Constant 1990 Dollars, 1960 to 1990



Source: CRS analysis of National Health Expenditure data.

50-590 0 - 91 - 2

Figure 14. Factors Contributing to the 1989-1990 Increase in Health Spending

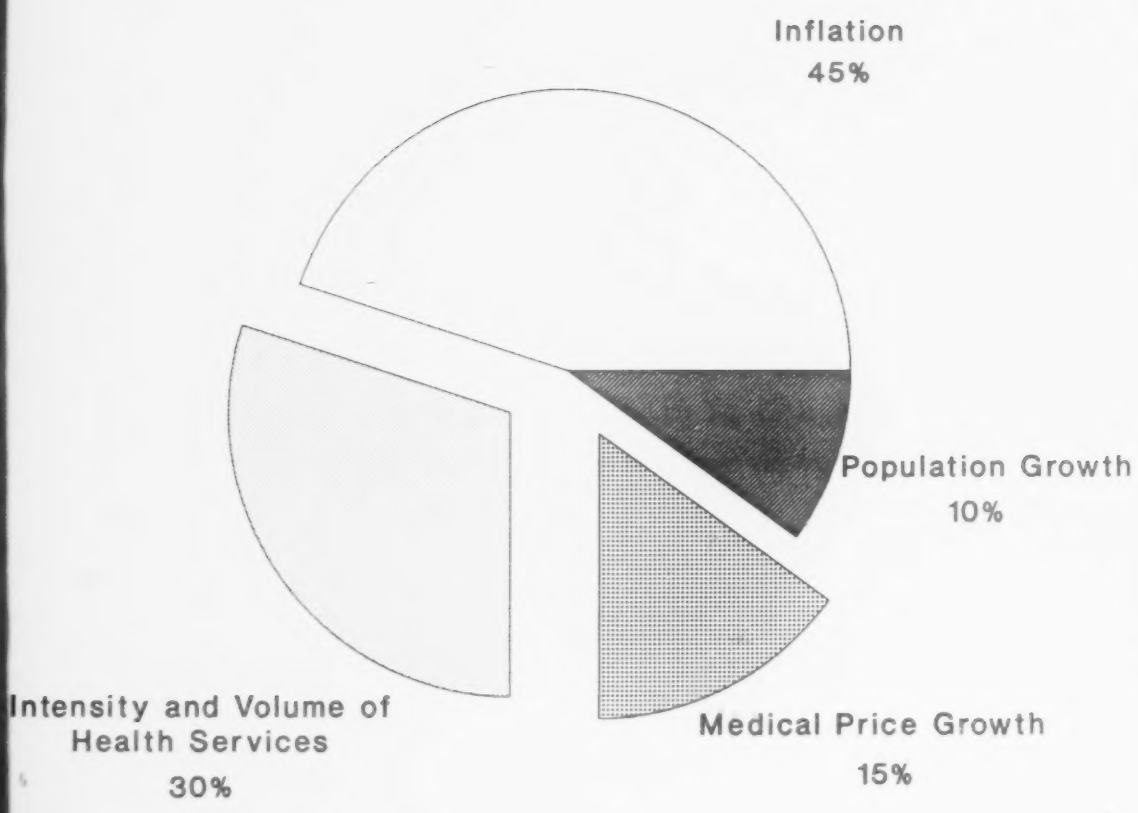
Two factors external to the health care system accounted for 55 percent of the increase in health care expenditures between 1989 and 1990. General price inflation accounted for 45 percent of the growth in health care expenditures. An increase in the size of the general population accounted for 10 percent of increased expenditures.

The remaining 45 percent of growth in expenditures can be attributed to factors related to medical care. Medical price inflation exceeding general price inflation accounted for an additional 15 percent of expenditure growth. Reasons for the remaining 30 percent of expenditure growth can not be identified separately, but are generally attributed to increased volume and intensity of services, among other factors.[1]

---

[1]Any errors in the measurement of inflation would be reflected in the volume and intensity category.

Figure 14: Factors Contributing to the 1989 - 1990 Increase in Health Spending

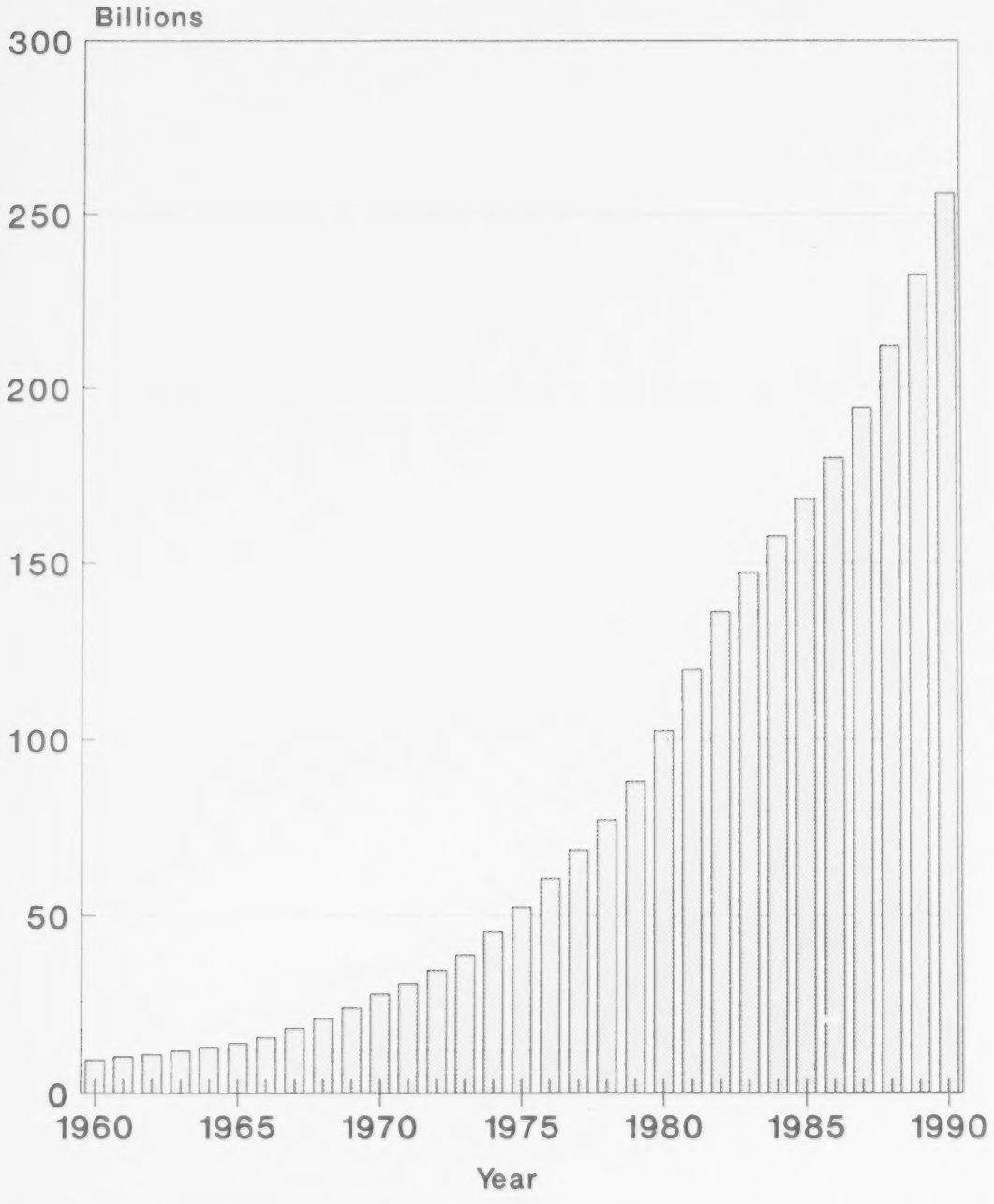


Source: CRS analysis of National Health Expenditure data.

Figure 15. Spending Trends for Inpatient and Outpatient Hospital Services, 1960-1990

Spending trends in hospital services include both inpatient and outpatient spending. Rates of increase in hospital spending were highest in the late 1960's, following the implementation of Medicare and Medicaid; in the mid-1970's; and in the early 1980's. During the mid-1980's, growth rates moderated to around 7 percent. Since 1987, the rate of increase in hospital spending accelerated, reaching 9.2 percent in 1988, 9.7 percent in 1989, and 10.1 percent in 1990.

Figure 15: Spending Trend for Inpatient and Outpatient Hospital Care Services, 1960 to 1990

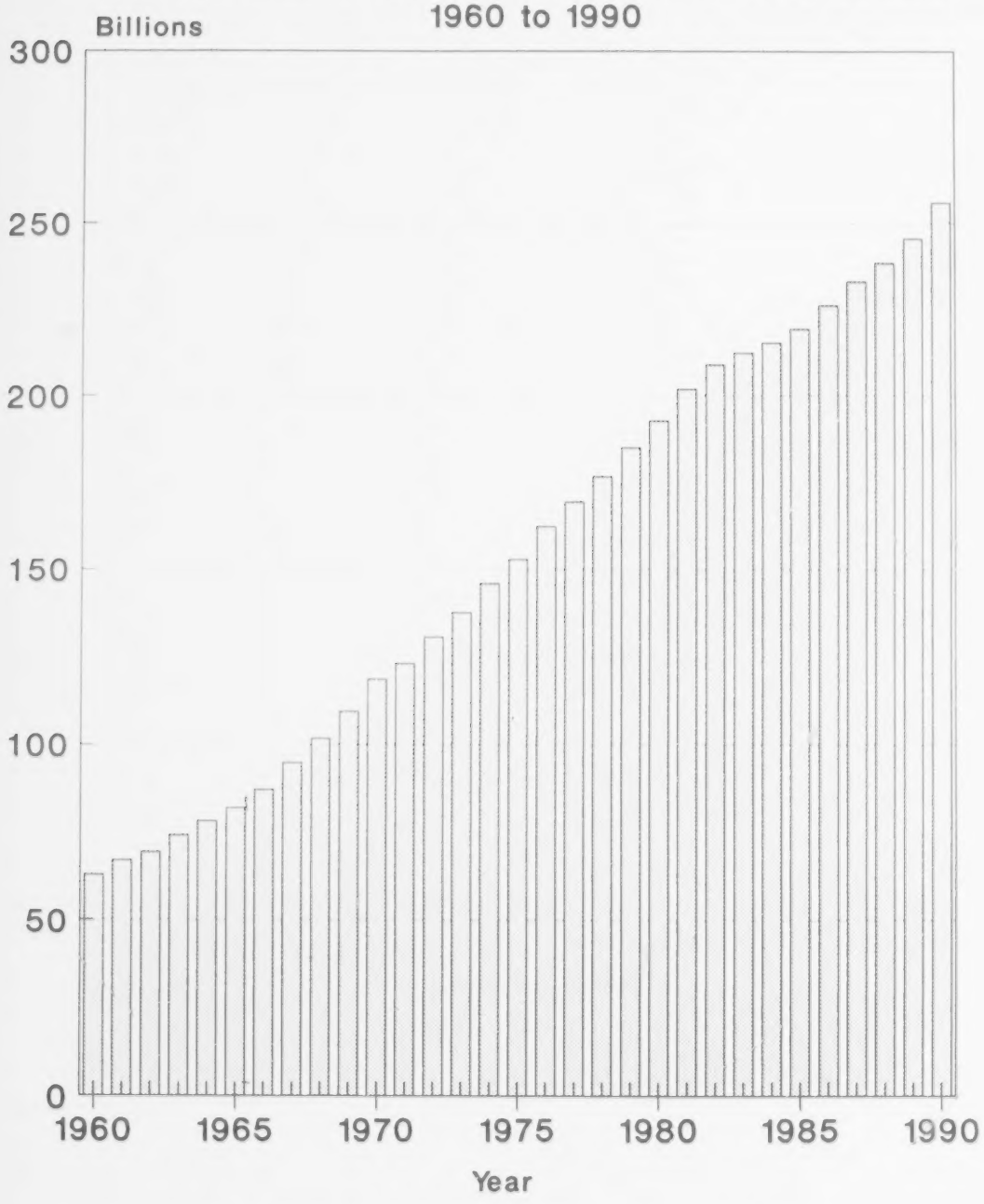


Source: CRS analysis of National Health Expenditure data.

Figure 16. Spending Trend for Inpatient and Outpatient Hospital Services in Constant 1990 Dollars, 1960 -1990

Spending for hospital care services has risen faster than the rate of general inflation since 1960. Real spending for hospital care rose most rapidly during the early years of Medicare and Medicaid, averaging 7.7 percent a year from 1965-70. Real growth rates were also rapid during the mid-1970's. Real growth in hospital spending moderated during the 1980's, averaging 2.9 percent from 1980 through 1990. Real growth rates of less than 2 percent a year from 1983 through 1985 contributed to this trend. Real spending for hospital services increased by 4.3 percent in 1990.

Figure 16: Spending Trend for Inpatient and Outpatient Hospital Care Services in Constant 1990 Dollars 1960 to 1990

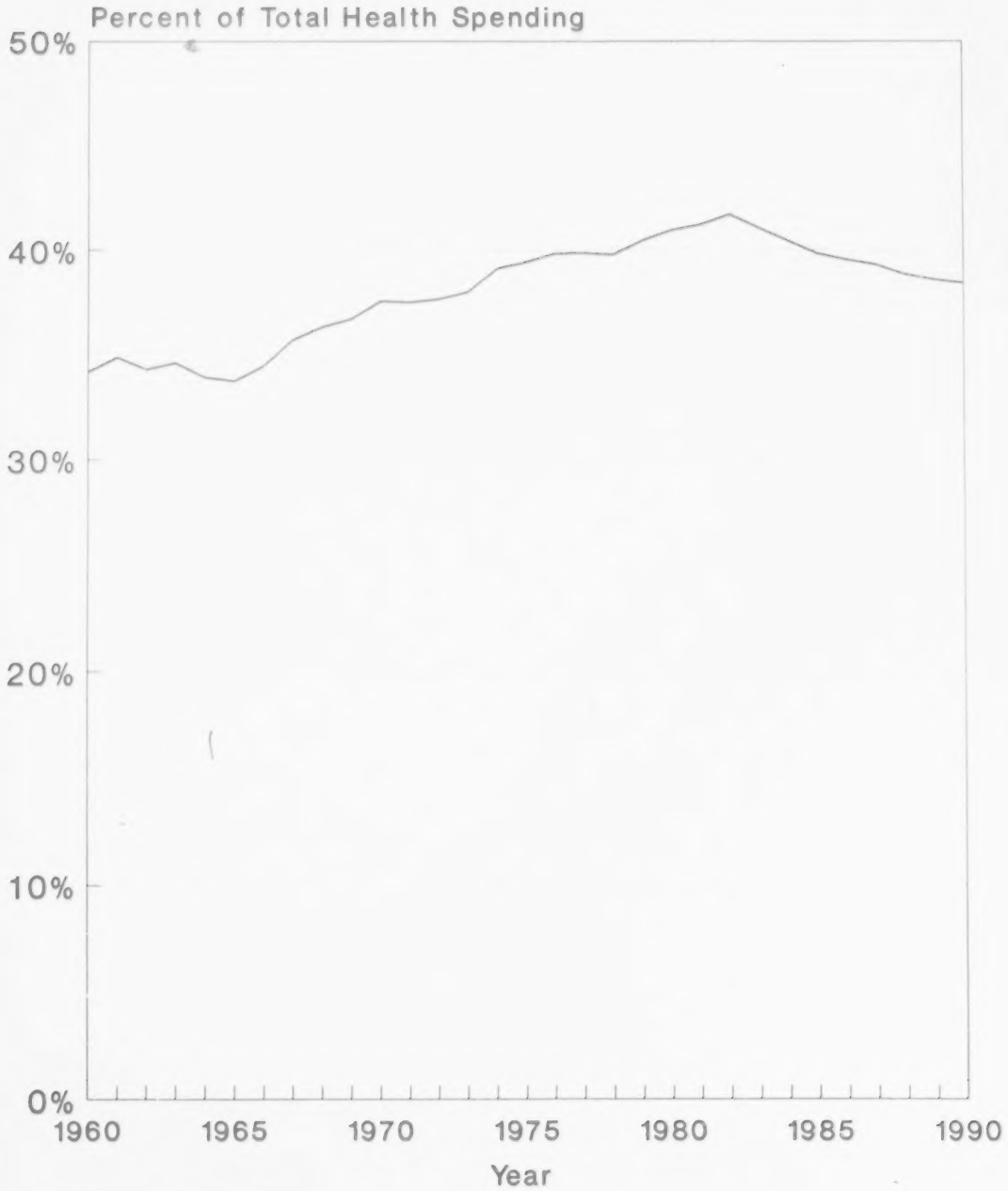


Source: CRS analysis of National Health Expenditure data.

Figure 17. Spending on Inpatient and Outpatient Hospital Care as a Share of Total Health Spending, 1960-1990

Hospital spending has always represented the largest component of national health spending. In 1960, hospital spending accounted for 34 percent of all health spending. It increased gradually to 42 percent by 1982. Hospital spending declined to 38.4 percent of the total in 1990, its lowest level since 1973.

Figure 17: Spending on Inpatient and Outpatient Hospital Care as a Share of Total Health Spending, 1960 to 1990

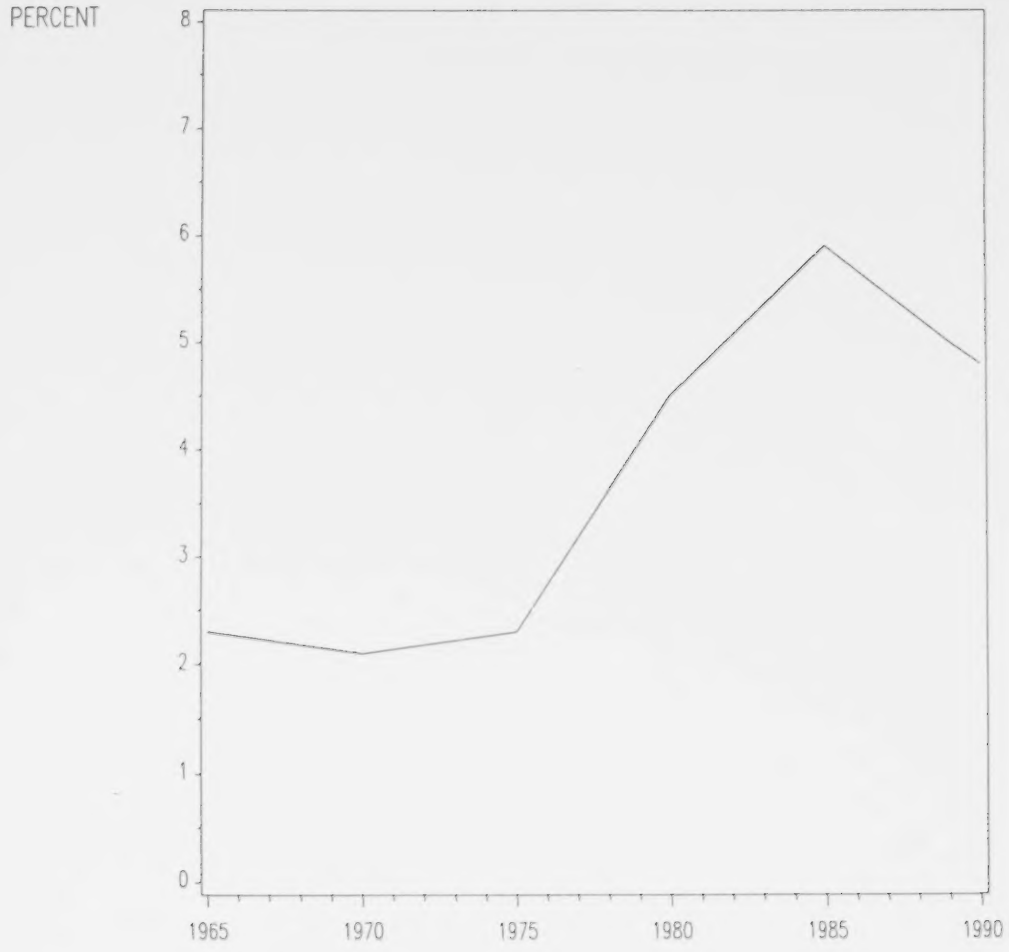


Source: CRS analysis of National Health Expenditure data.

Figure 18. Hospital Margins Based on Total Revenues, 1965-1990

Hospital margins are defined as the difference between revenues received by hospitals and their costs, as a percentage of revenues. Between 1965 and 1975, hospital margins were nearly constant at around 2.3 percent. They began to rise in 1975, reaching nearly 6 percent in 1985 before declining to 4.8 percent in 1990. Even with the recent decline in hospital margins, hospitals had substantially higher margins at the end of the 1980's than in the pre-1980 period.

FIGURE 18. HOSPITAL MARGINS BASED ON TOTAL REVENUES, 1965–1990



SOURCE: Congressional Budget Office calculations based on data from the American Hospital Association, National Hospital Panel Surveys, 1965–1990.

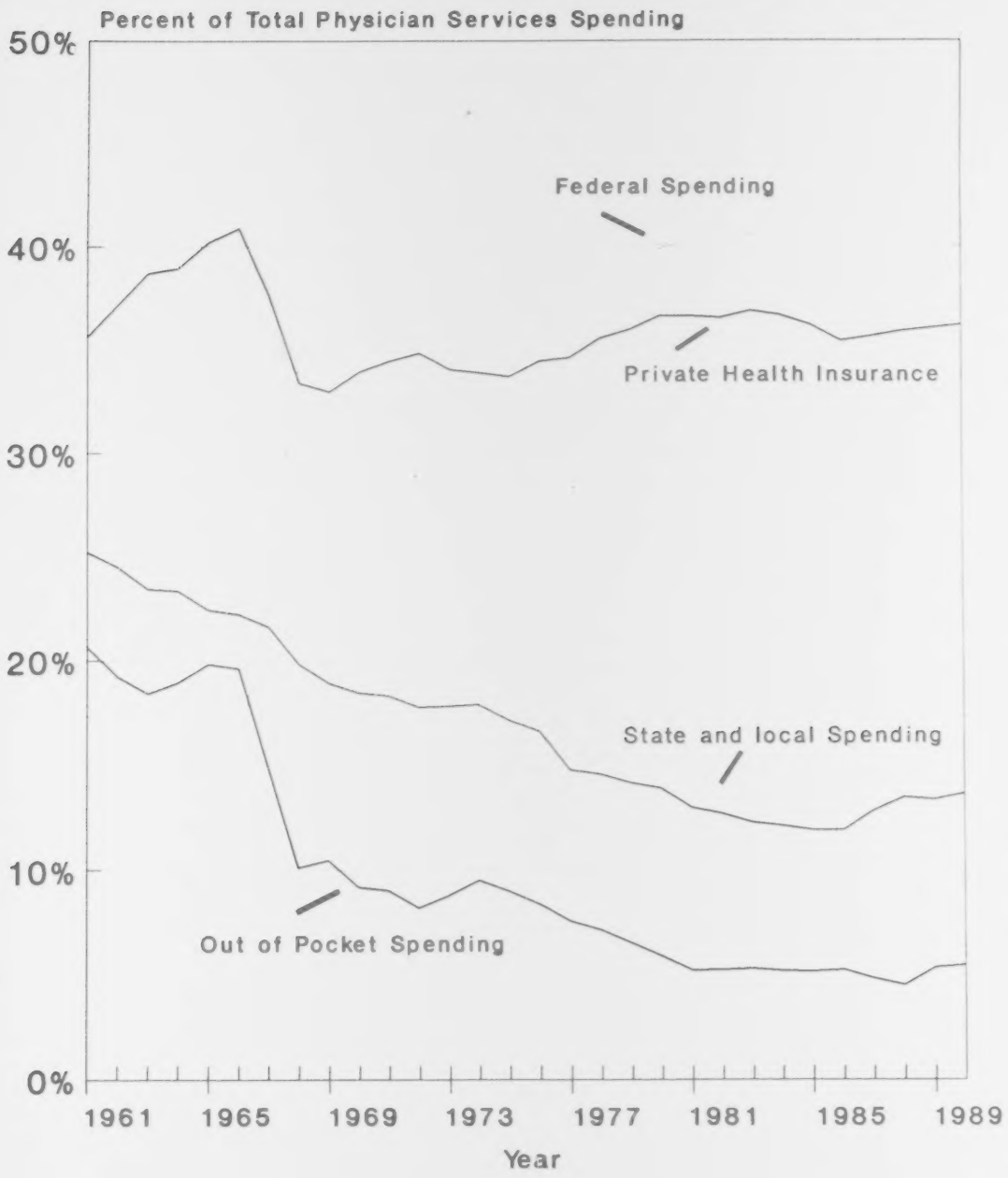
NOTE: The total margin is defined as the ratio of total revenues minus total costs to total revenues.

Figure 19. Selected Sources of Payment for Hospital Spending, 1960-1989

The sources of payment for hospital spending have changed significantly since 1960. Prior to the implementation of Medicare and Medicaid, the Federal government financed about 15 percent of hospital spending. The share of hospital spending paid for by the Federal government increased sharply in the late 1960's, then continued rising gradually, reaching its peak of 42.6 percent in 1985, before falling to 39.9 percent in 1989.

Out-of-pocket spending, which constituted 21 percent of payments for hospital spending in 1960, fell sharply in the late 1960's, and thereafter declined very gradually to 4.5 percent in 1987. Copayment and deductible requirements have resulted in a slight increase in out-of-pocket payments for health care. In 1989, out-of-pocket spending accounted for 5.5 percent of hospital spending. Private health insurance payments for hospital care also fell sharply in the late 1960's, reaching a low of 32.9 percent in 1968. Since then, private health insurance's share of hospital spending has risen gradually. In 1989, it was 36.2 percent of the total. State and local governments' share of hospital spending fell from 25.2 percent in 1960 to 13.6 percent in 1989.

Figure 19: Selected Sources of Payment for Hopsital Services Spending, 1960 to 1989



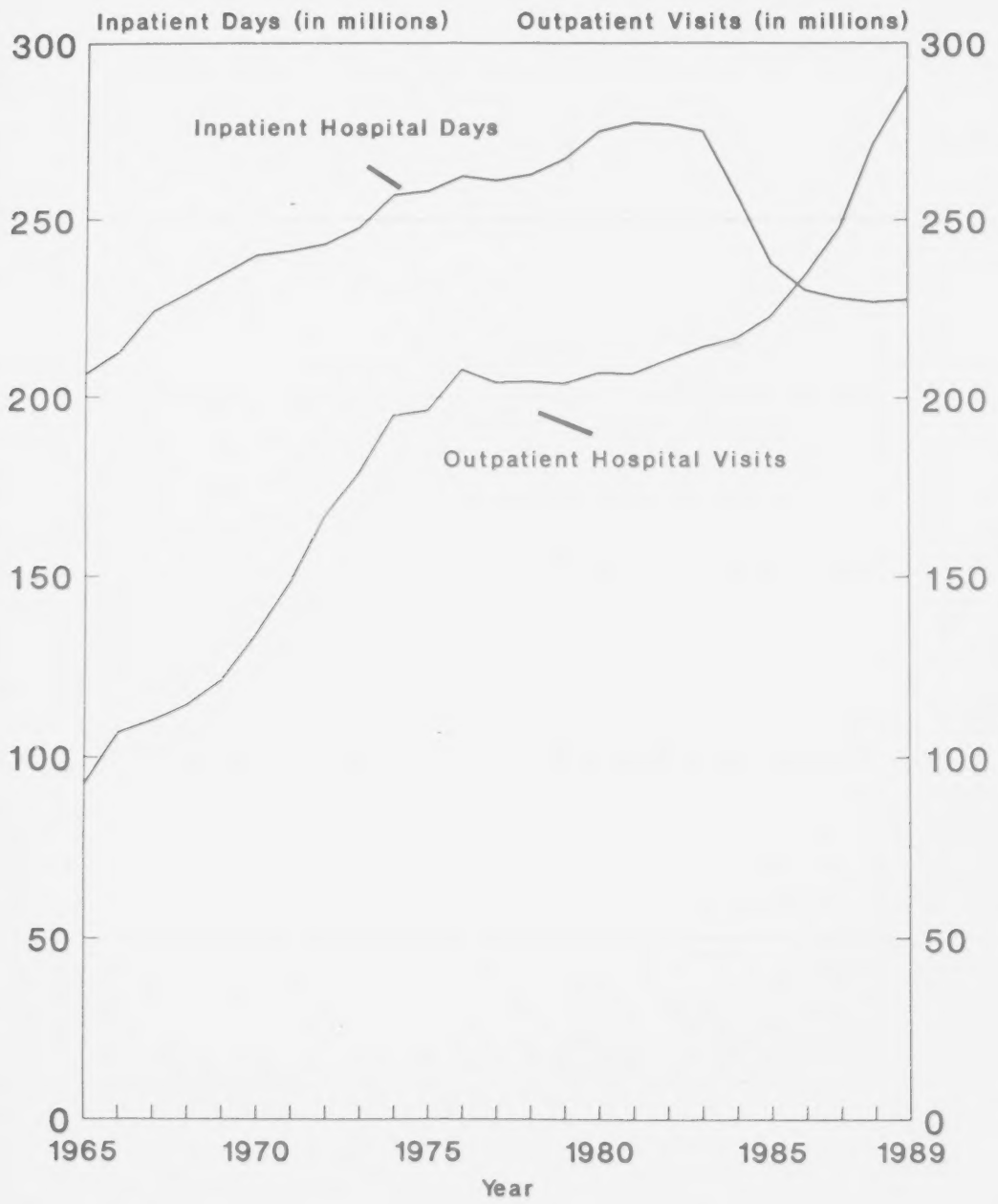
Source: CRS analysis of National Health Expenditure data.

Figure 20. Trends in Outpatient Visits and Inpatient Days, Short-Term General and Other Special Hospitals, 1965-1989

Between 1965 and 1975, the number of inpatient days increased from just over 200 million to 275 million, while the number of outpatient visits more than doubled, from less than 100 million to over 200 million. Hospital use patterns were fairly stable between 1975 and 1980. From 1981 to 1985, the number of inpatient days dropped sharply, while the number of outpatient visits grew modestly. The decline in inpatient days occurred because of declines in both the number of admissions and average lengths of stay.

From 1985 to 1988, the number of inpatient days continued to decline, but increased slightly in 1989. The number of outpatient visits continued to increase sharply during this period. Between 1985 and 1989, outpatient visits increased an average of 6.6 percent a year, compared to 1.5 percent a year between 1980 and 1985.

Figure 20: Trends in Outpatient Visits and Inpatient Days, Short-Term General and Other Special Hospitals, 1965 - 89

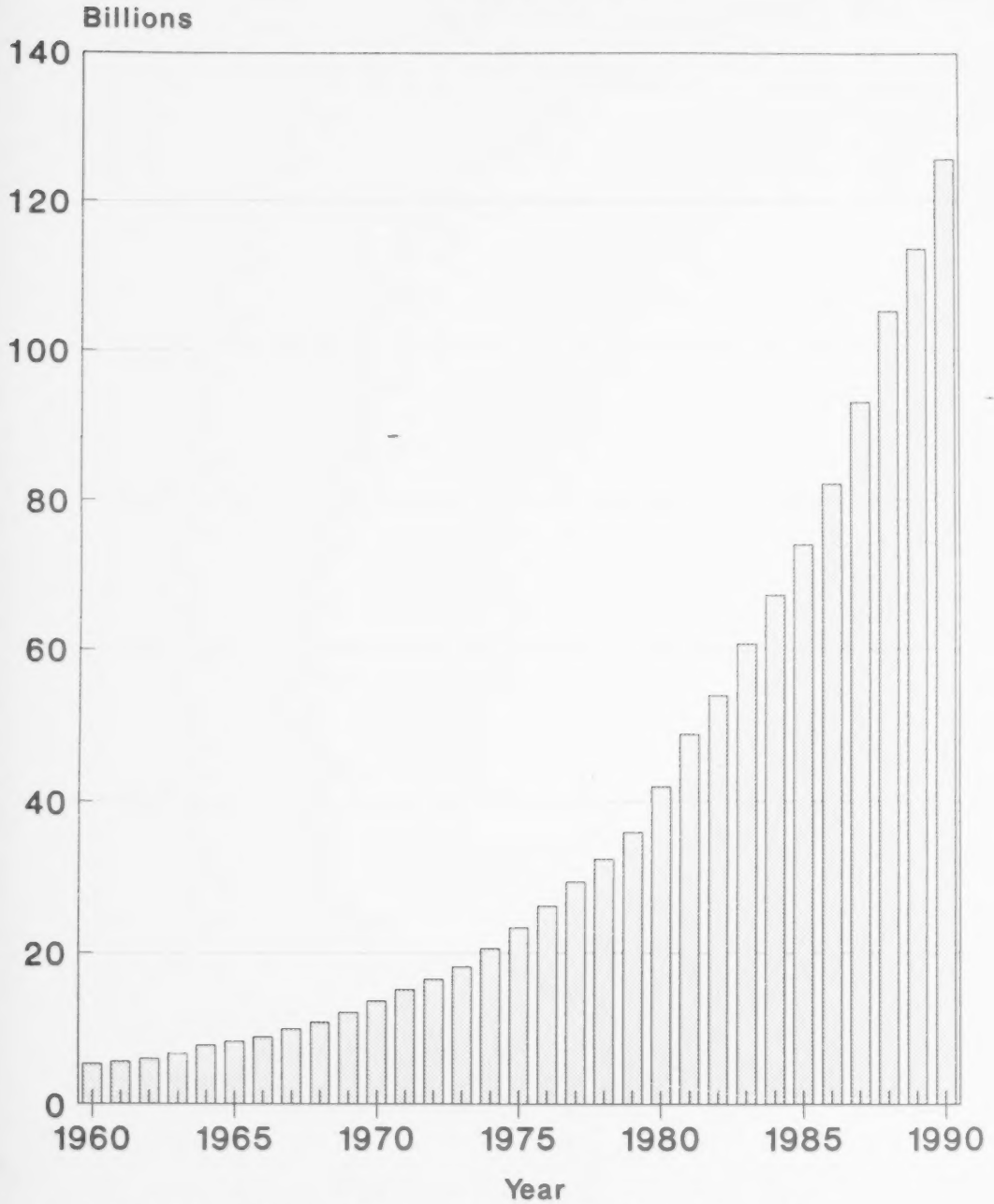


Source: CRS analysis of data from American Hospital Assoc.

Figure 21. Spending Trends for Physicians' Services, 1960-1990

From 1960 through 1990, spending on physicians' services increased an average of 11.1 percent a year. In the 1980's, the rate of growth in spending was slightly faster, averaging 11.6 percent a year from 1980 to 1990. In part, the higher average rate for the 1980's reflects very high rates of growth in the early 1980's--16.5 percent in 1981. The rate of growth moderated slightly mid-decade, although it was always in excess of 10 percent. In the late 1980's, the pace of growth accelerated, exceeding 13 percent in 1987 and 1988. In 1989, the rate of growth declined to 8 percent, but it then rose to 10.7 percent in 1990.

Figure 21: Spending Trends for Physician Services 1960 to 1990

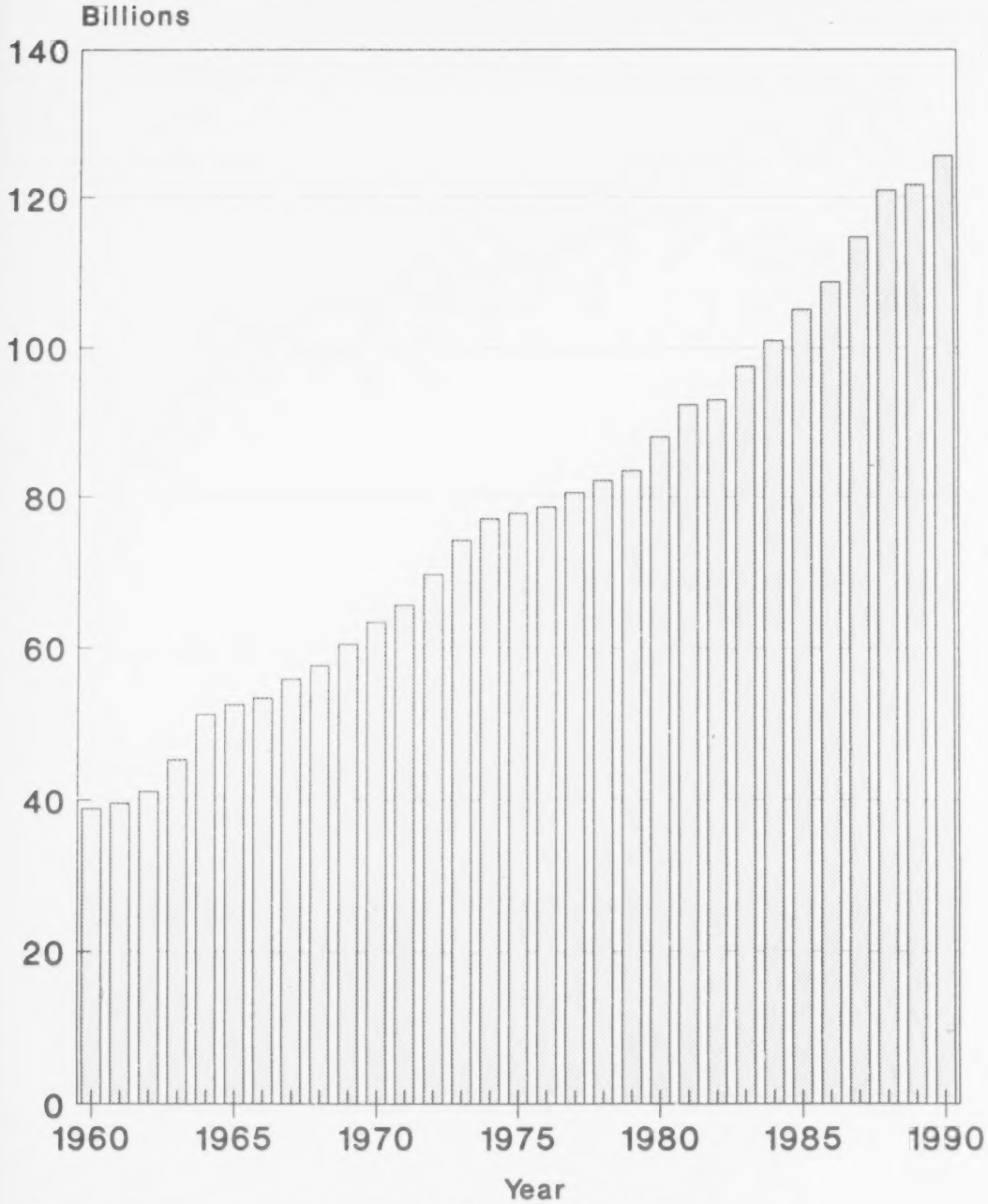


Source: CRS analysis of National Health Expenditure data.

Figure 22. Spending Trend for Physicians' Services in Constant 1990 Dollars, 1960-1990

Real spending for physicians' services rose an average of 4.0 percent from 1960-1990. Real spending on physicians' services grew most rapidly between 1962 and 1964 and between 1971 and 1973. Real spending continued to grow in the 1980's, despite payment limitations imposed by Medicare and other insurers. In 1990, the real rate of growth in physicians' services was 3.2 percent.

Figure 22: Spending Trends for Physician Services in Constant 1990 Dollars, 1960 to 1990

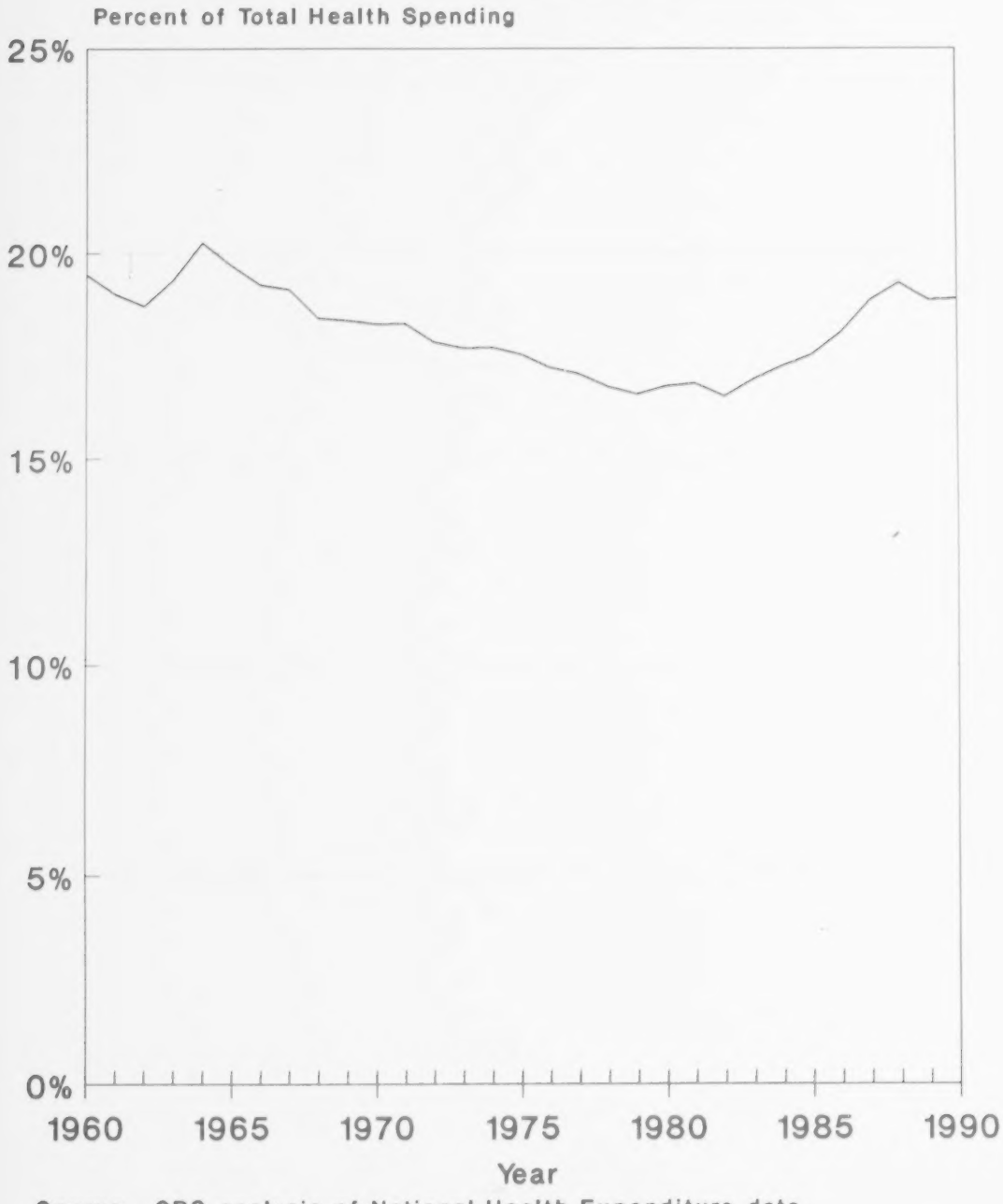


Source: CRS analysis of National Health Expenditure data.

Figure 23. Spending for Physician Services as a Share of Total Health Spending, 1960 -1990

In 1960, spending for physicians' services accounted for 19.5 percent of all health care expenditures; in 1989, physicians' services accounted for exactly the same share of total health expenditures. In the intervening years, however, the share of health spending accounted for by physicians' services has varied. It declined gradually to a low of 16.6 percent in 1979 before rising through the 1980's. In 1990, spending on physician services equalled 18.9 percent of all expenditures.

Figure 23: Spending for Physician Services as a Share of Total Health Spending, 1960 to 1990

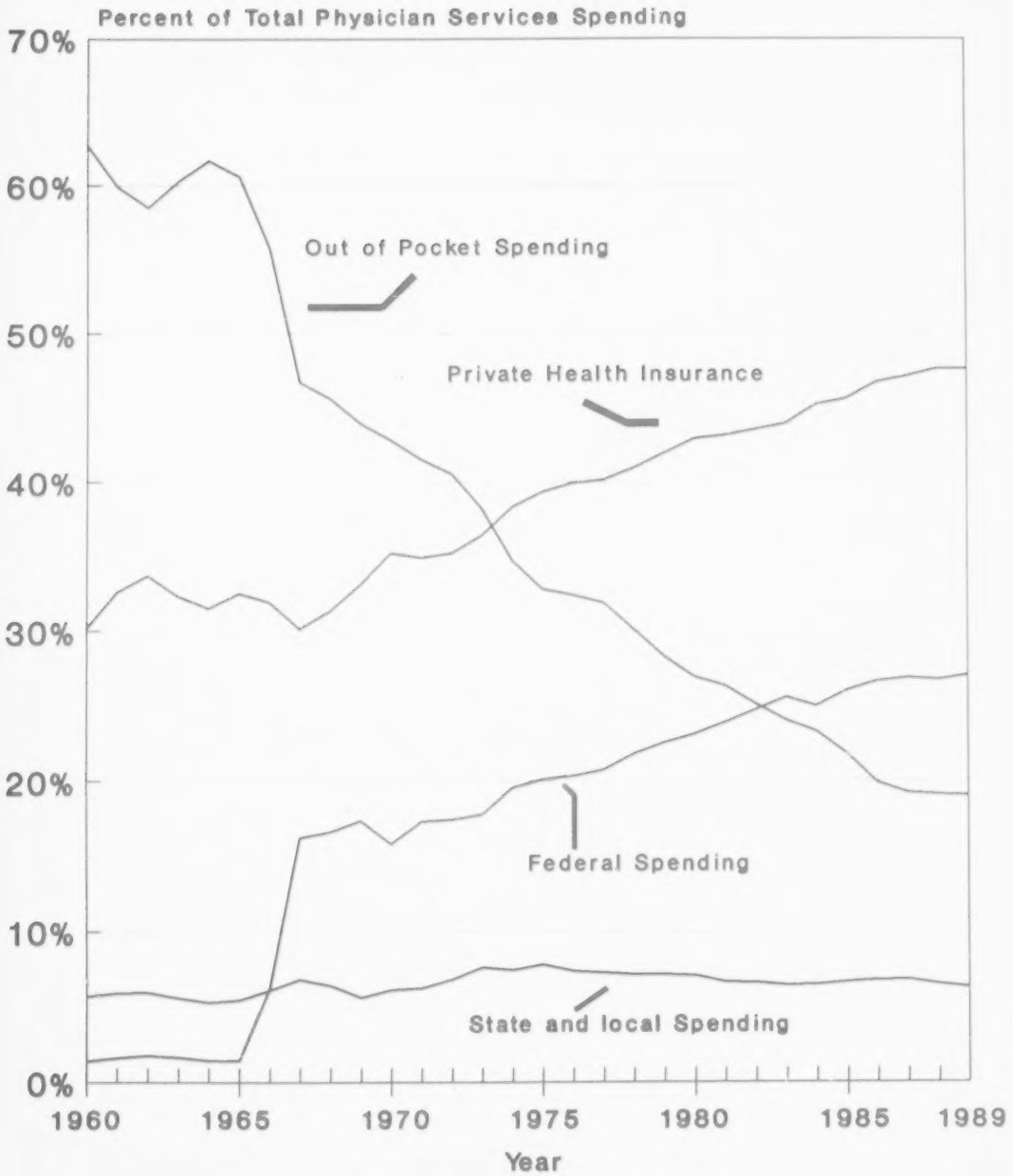


Source: CRS analysis of National Health Expenditure data.

Figure 24. Selected Sources of Payment for Physician Services, 1960-1989

Since 1960, the percentage of physicians' services paid for by third party payers has increased dramatically. In 1960, almost 63 percent of all physician services were paid for out-of-pocket; by 1970, out-of-pocket payments constituted about 43 percent of payments for physicians' services. In 1989, out-of-pocket payments constituted only about 19 percent of all payments for physicians' services. Although the Federal government's coverage of physician services through Medicare increased the Federal role in paying for physicians' services, growth in private insurance coverage has also been substantial. In 1960, private insurance paid for 30 percent of all physicians' services. By 1989, private insurers paid for 48 percent of all physicians' services.

Figure 24: Selected Sources of Payment for Physician Services, 1960 to 1989

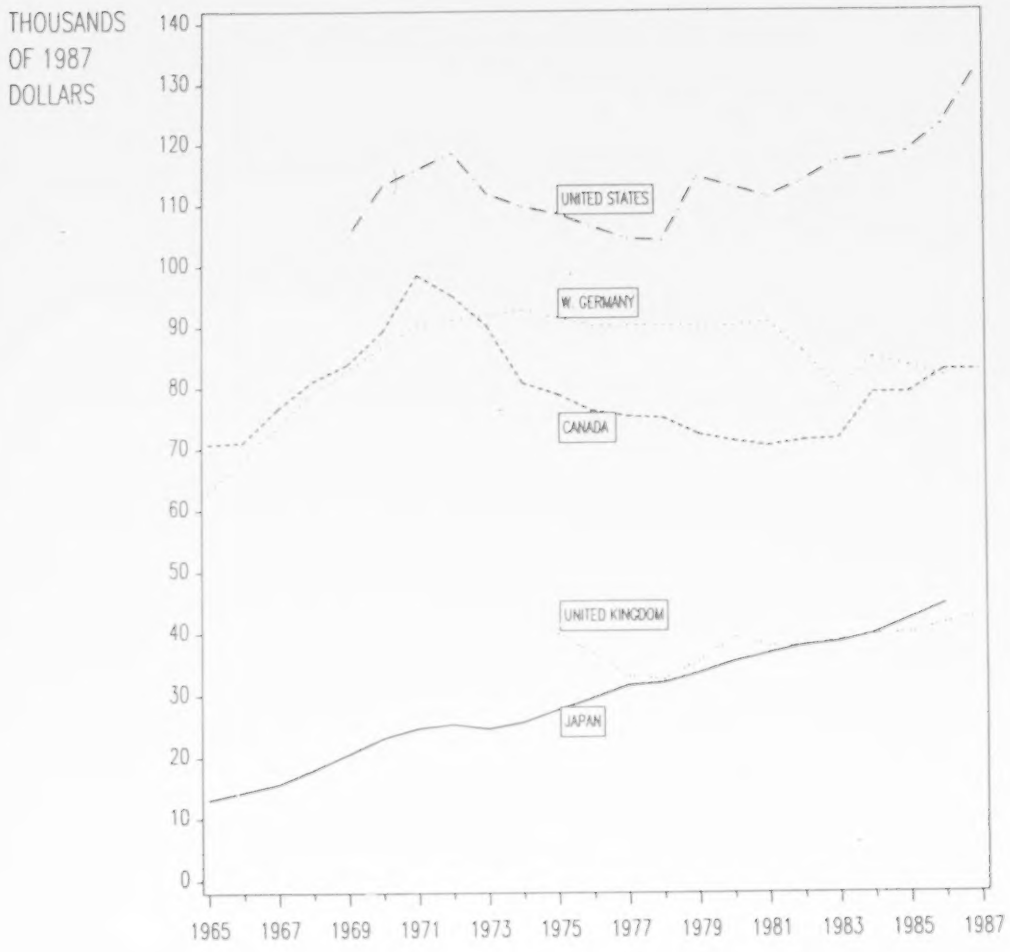


Source: CRS analysis of National Health Expenditure data.

Figure 25. Average Real Physician Income, United States and Selected Countries, 1965-1987

The average real income of physicians in the United States is higher than other countries. In 1969, the earliest year for which U.S. data are available, real physician income in the United States (expressed in 1987 constant dollars) was $104,744. By 1987, the real income of U.S. physicians had grown to $132,200. By comparison, the real income of Canadian physicians was $70,814 in 1965, and $82,764 in 1987. West German physicians had average real incomes of $79,280 in 1968, and $81,759 in 1986. Japanese physicians had average real incomes of $13,035 in 1965 and $44,571 in 1986. In 1975, the earliest year for which data are available from the United Kingdom, the average real income of physicians was $39,817. By 1989, it was $42,641.

FIGURE 25. AVERAGE REAL PHYSICIAN INCOME, UNITED STATES AND SELECTED COUNTRIES, 1965–1987



SOURCE: Congressional Budget Office calculations based on data from the Organization for Economic Cooperation and Development, Health Data File, 1989, as reported in the Health Care Financing Review, 1989 Annual Supplement.

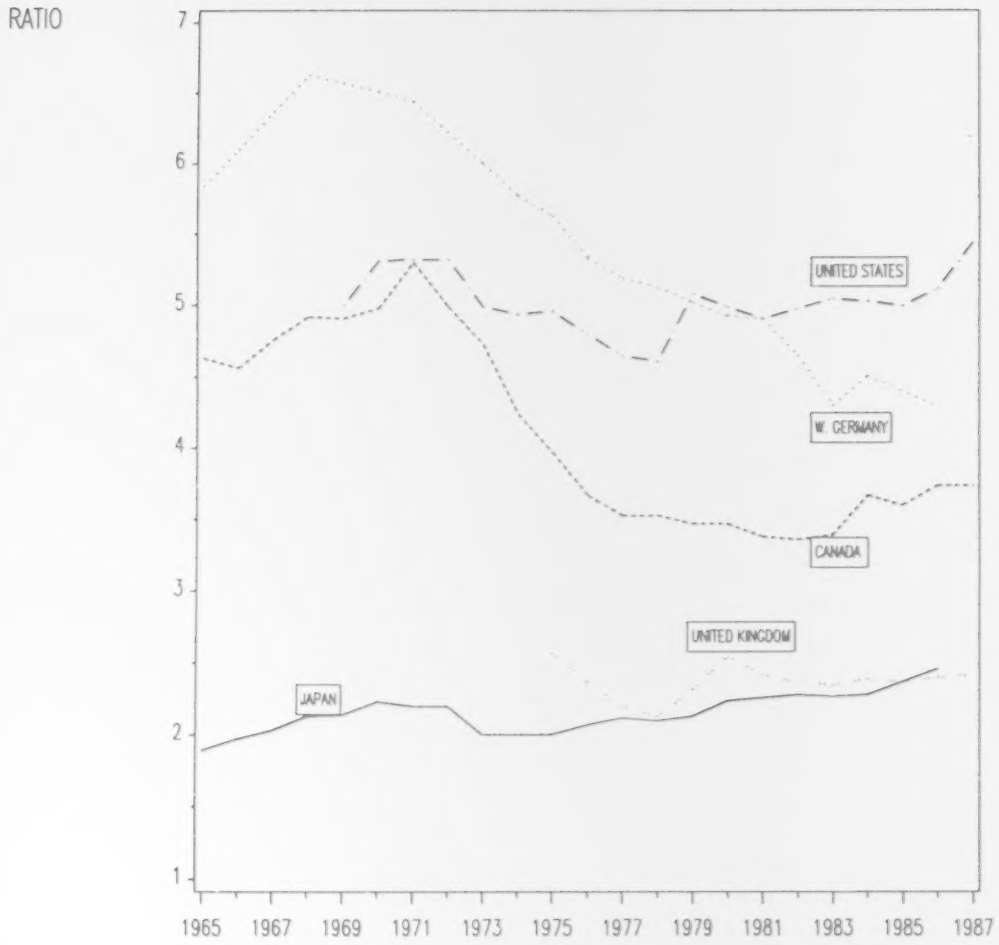
NOTES: Data for the following were missing and values were imputed by the Congressional Budget Office: 1971, 1976, 1980, and 1984 for the United States; 1966, 1967, 1969, 1970, 1972, and 1973 for West Germany; and 1985 for Japan. Data missing at the beginning and end of the time periods were not imputed.

Incomes in different countries were expressed in a common currency (U.S. dollars) using OECD estimates of a "purchasing power parity" (PPP) rate of exchange between national currencies. PPP is an estimate of the exchange rate at which a dollar can buy the same basket of goods in each country.

Figure 26. Ratio of Average Income of Physicians to Average Compensation of All Employees, United States and Selected Countries, 1965-1987

The ratio of the average income of physicians in the United States to the average compensation of all employees has been higher than in other countries shown since 1982. Prior to that, West Germany was the only country where the ratio of the average income of physicians to all employees was higher than the U.S.. In 1987, the ratio of physician income to all employees' incomes was 5.44 in the U.S.; 3.74 in Canada; 4.29 in West Germany (in 1986); 2.46 in Japan (also in 1986) and 2.42 in the United Kingdom.

FIGURE 26. RATIO OF AVERAGE INCOME OF PHYSICIANS TO AVERAGE COMPENSATION OF ALL EMPLOYEES, UNITED STATES AND SELECTED COUNTRIES, 1965–1987



SOURCE: Congressional Budget Office calculations based on data from the Organization for Economic Cooperation and Development, Health Data File, 1989, as reported in the Health Care Financing Review, 1989 Annual Supplement.

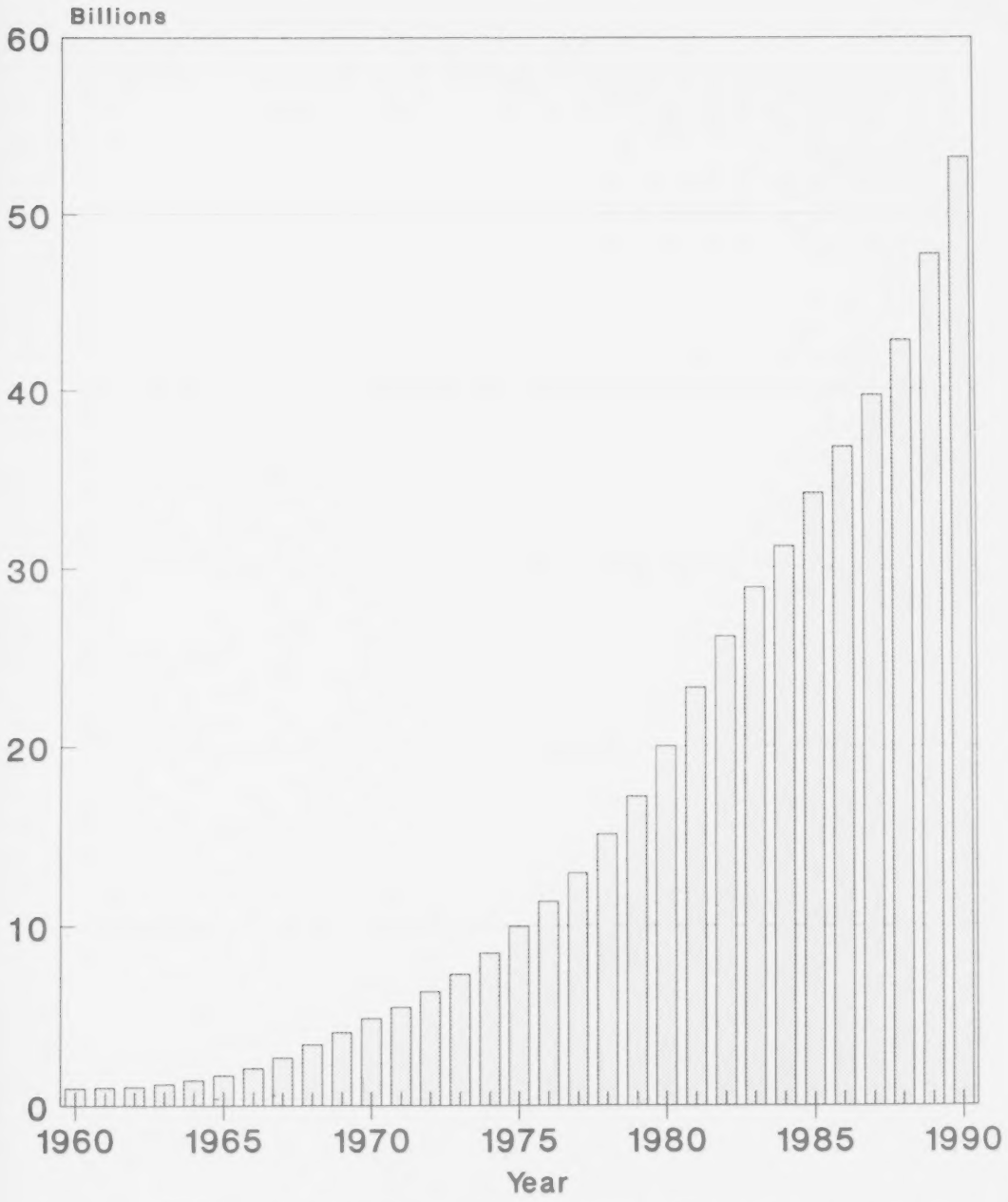
NOTES: Data for the following were missing and values were imputed by the Congressional Budget Office: 1971, 1976, 1980, and 1984 for the United States; 1966, 1967, 1969, 1970, 1972, and 1973 for West Germany; and 1985 for Japan. Data missing at the beginning and end of the time periods were not imputed.

The concepts and estimating methodologies used to compile average compensation per employee are not the same across countries, nor necessarily within each country over time. Among the issues that cannot be taken fully into account are the regional or national basis of the estimates, whether or not both salaried and self-employed professionals are included in the figures, the exact nature of the professional groups covered, the treatment of part-time and female workers, and whether or not the income definitions used reflect income-tax, census, or national-accounts concepts.

Figure 27. Spending Trends for Nursing Home Services, 1960-1990

Nursing home care includes care in intermediate care facilities (ICFs), skilled nursing facilities (SNFs) and, beginning in 1973, intermediate care facilities for the mentally retarded (ICF-MRs). Spending on nursing home care rose at an average annual rate of 14.2 percent from 1960-1990. The highest rate of growth was between 1965 and 1970, when nursing home services grew an average of 23.4 percent a year. Rates of growth in the 1970's averaged over 15 percent, but have been more moderate in the 1980's. From 1985 through 1990, the rate of growth in nursing home services was 9.3 percent.

Figure 27: Spending Trends for Nursing Home Services 1960 to 1990

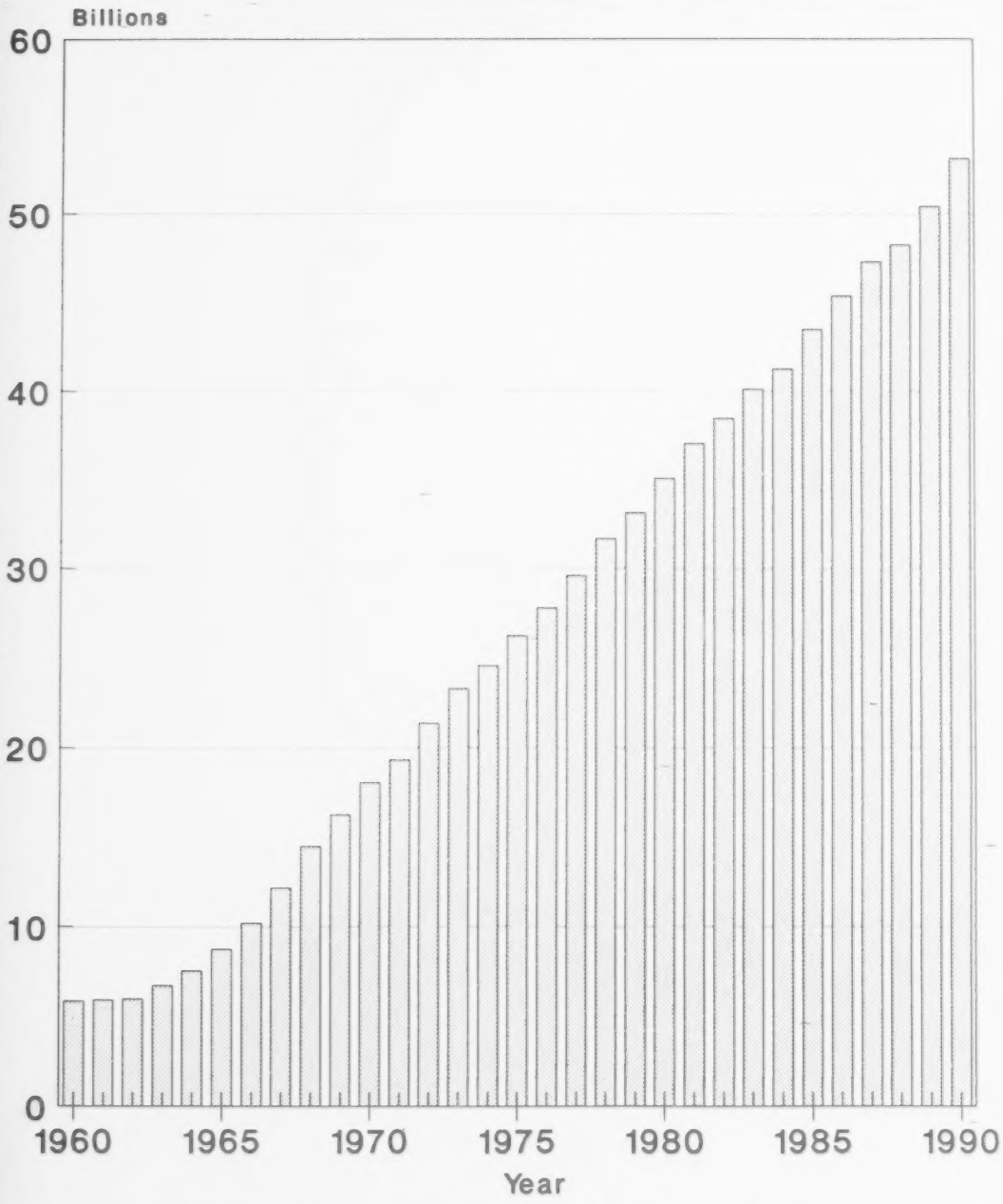


Source: CRS analysis of National Health Expenditure data.

Figure 28. Spending Trends for Nursing Home Services in Constant 1990 Dollars, 1960-1990

Real spending on nursing home services grew an average of 7.6 percent from 1960 through 1990. The most rapid rate of growth in real nursing home spending occurred between 1965 and 1970, when real expenditures grew an average of 15.6 percent a year. The real rate of growth in nursing home spending averaged 4.2 percent a year from 1980 through 1990. In 1990, the real rate of growth in nursing home spending was 5.4 percent.

Figure 28: Spending Trends for Nursing Home Services in Constant 1990 Dollars, 1960 to 1990

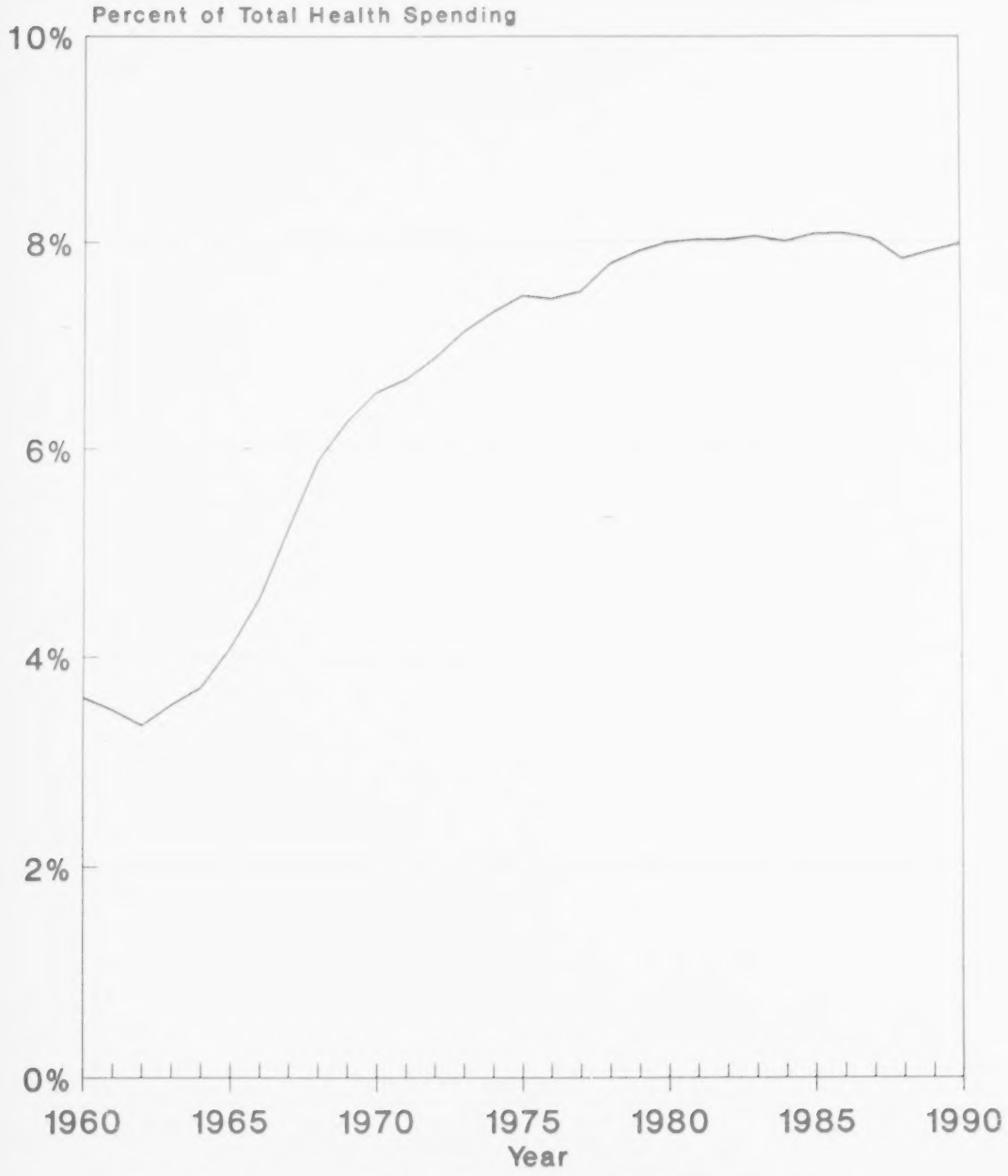


Source: CRS analysis of National Health Expenditure data.

Figure 29. Spending for Nursing Home Services as a Share of Total Health Spending, 1960-1990

In 1960, spending for nursing home care constituted 3.6 percent of national health care spending. By 1981, its share of total spending grew to 8.0 percent. Since that time, it has remained relatively constant. In 1990, nursing home spending accounted for 8.0 percent of national health expenditures.

Figure 29: Spending for Nursing Home Services as Share of Total Health Spending, 1960 to 1990



Source: CRS analysis of National Health Expenditure data.

50-590 0 - 91 - 3

Figure 30. A Comparison of the Share of Nursing Home Spending Paid for by Selected Payers in 1965, 1980 and 1988

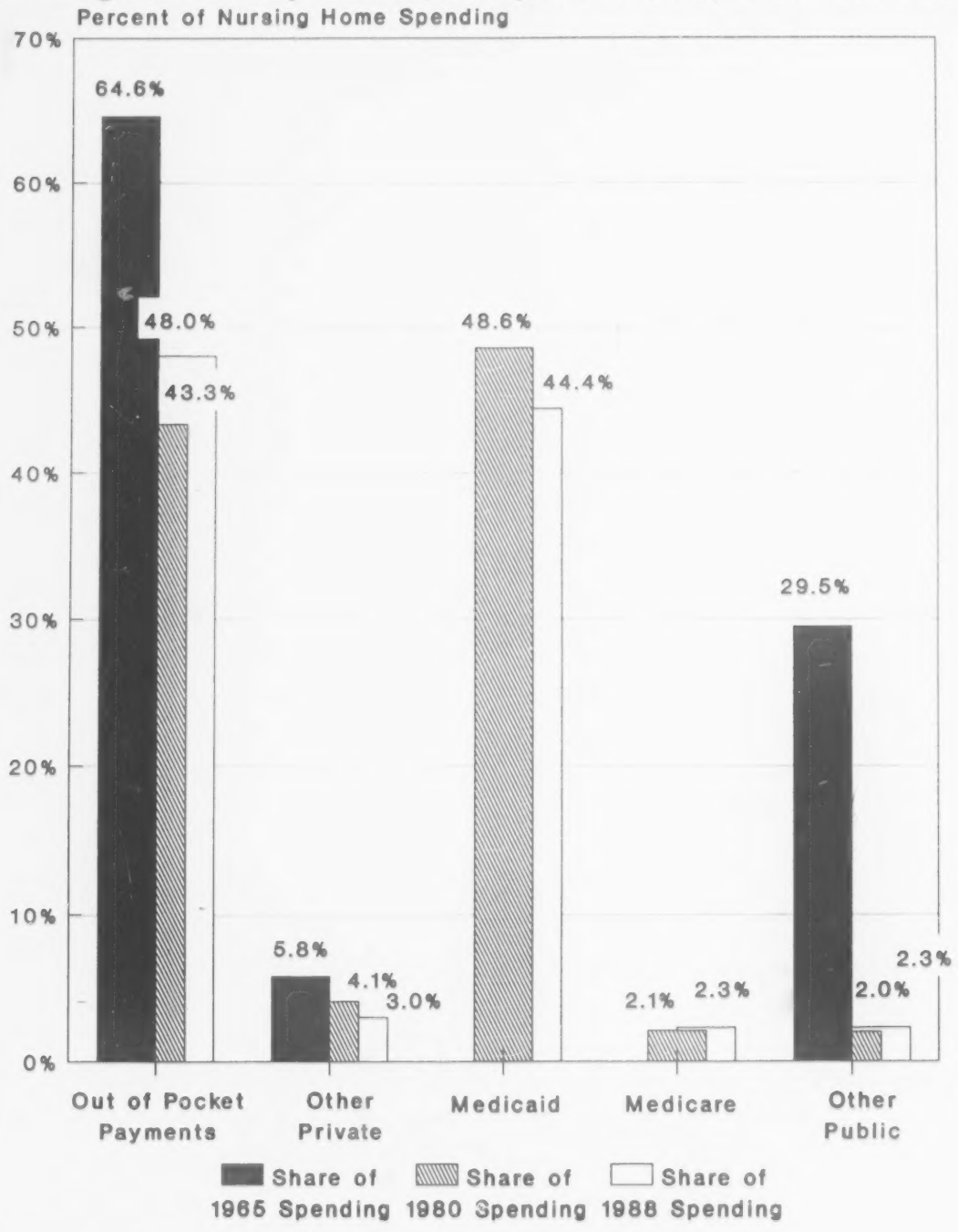
The sources of payment for nursing home services are markedly different than they are for hospital and physician services because nursing home services are not generally covered by private health insurance. In 1965, out-of-pocket payments were the dominant source of funding for nursing home services, comprising 64.6 percent of all nursing home spending. In 1988, they were still the largest source of payment, accounting for 48 percent of total nursing home spending.

Since its creation, Medicaid has become a very large payer of nursing home services. Medicaid financed 44.4 percent of nursing home payments in 1988. Medicaid financing of nursing home care has largely usurped State and local government financing programs. Medicare and private health insurance are negligible payers of nursing home services.[3]

---

[3]The 1988 Medicare Catastrophic Coverage Act provided expanded coverage of nursing home services in 1989. Since it has been repealed, Medicare payments for nursing home services are expected to revert to their pre-1989 level.

Figure 30: A Comparison of the Share of Nursing Home Spending Paid for by Selected Payers in 1965, 1980 and 1988

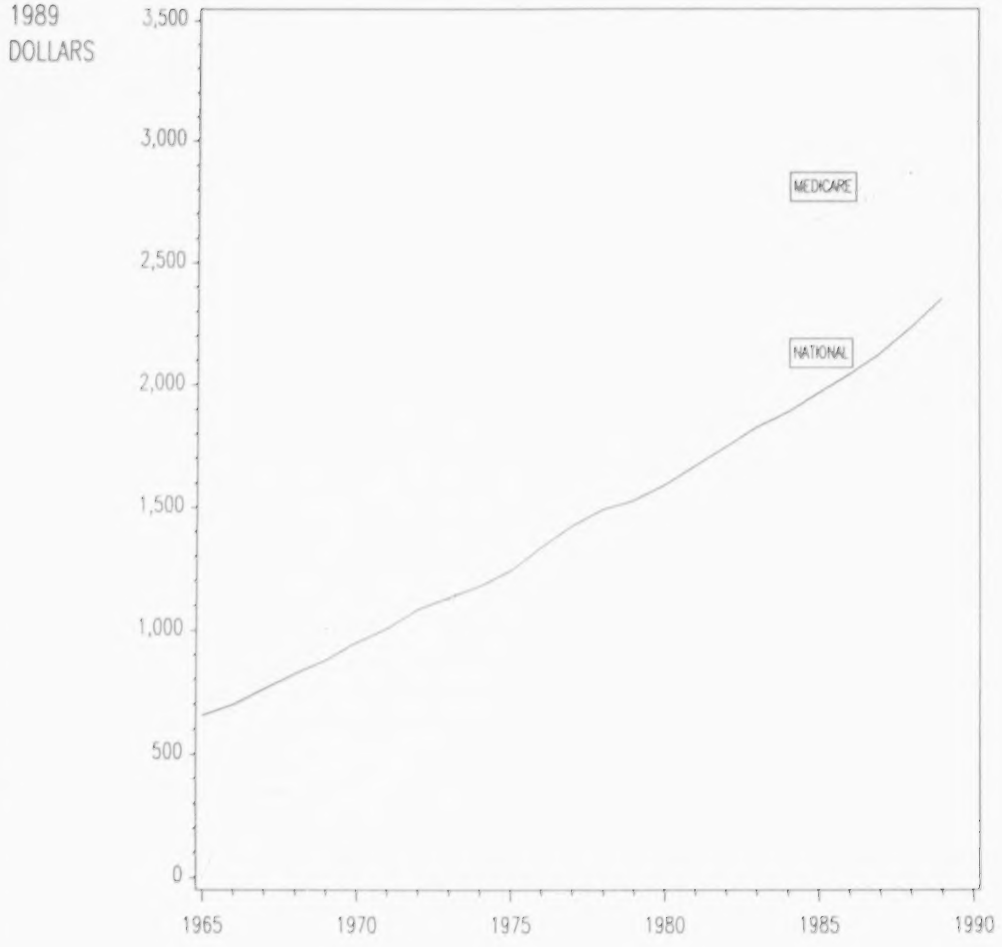


Source: CRS analysis of National Health Expenditure data.

Figure 31. Real Per Capita National Expenditures and Per Enrollee Medicare Expenditures for Health, 1965-1989

Real Medicare spending per enrollee has risen faster than real national health spending per capita. Between 1970 and 1989, real Medicare spending per enrollee nearly tripled from $1,022 (in 1989 constant dollars) to $3,041. During the same time period, real national health spending per capita increased about two and a half times, from $950 (in 1989 constant dollars) to $2,354. In part, Medicare spending per enrollee rose at a more rapid pace because the inclusion of disabled enrollees in Medicare in 1974. Disabled enrollees incur higher costs than aged enrollees.

FIGURE 31. REAL PER CAPITA NATIONAL EXPENDITURES AND PER ENROLLEE MEDICARE EXPENDITURES FOR HEALTH, 1965–1989



SOURCE: Congressional Budget Office calculations based on data from the Health Care Financing Administration, Office of the Actuary, 1991.

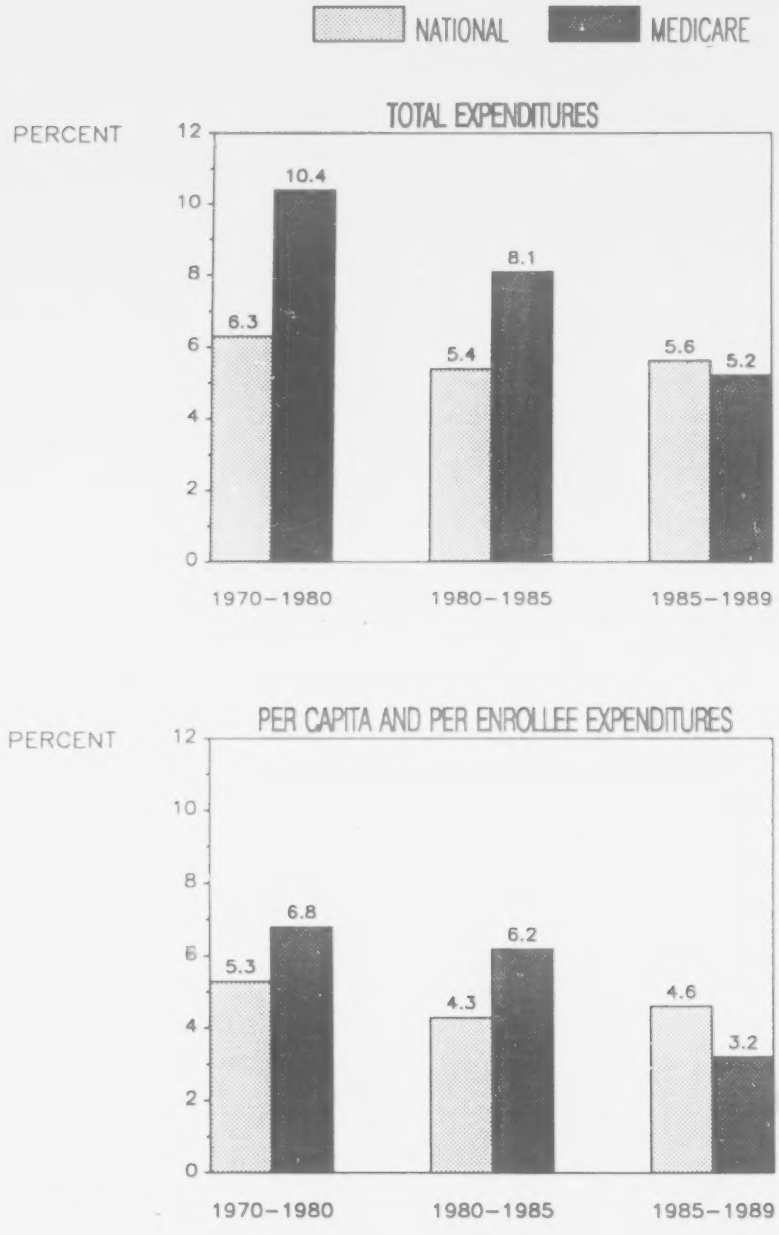
NOTE: All data are presented in 1989 dollars, using the GNP fixed-weighted deflator.

Figure 32. Average Annual Growth Rates of Real National and Medicare Expenditures for Health, Total and Per Capita, 1970-1989

Between 1970 and 1980, real Medicare spending rose at an average annual rate of 10.4 percent, compared with 6.3 percent for real national health spending. On a per person basis, Medicare spending also increased at a more rapid rate than national health spending during this period--6.8 percent per enrollee versus 5.3 percent per capita for national health expenditures.

Through the first half of the 1980's, Medicare spending continued to outpace national spending, on both a total and a per person basis. During the 1985 to 1989 period, real national health spending grew slightly faster than Medicare spending--5.6 percent for national expenditures versus 5.2 percent for Medicare expenditures. From 1985-1989, per capita health expenditure grew at an average annual rate of 4.6 percent, compared to 3.2 percent per Medicare enrollee.

FIGURE 32. AVERAGE ANNUAL GROWTH RATES OF REAL NATIONAL AND MEDICARE EXPENDITURES FOR HEALTH, TOTAL AND PER CAPITA, 1970–1989



SOURCE: Congressional Budget Office calculations based on data from the Health Care Financing Administration, Office of the Actuary, 1991.

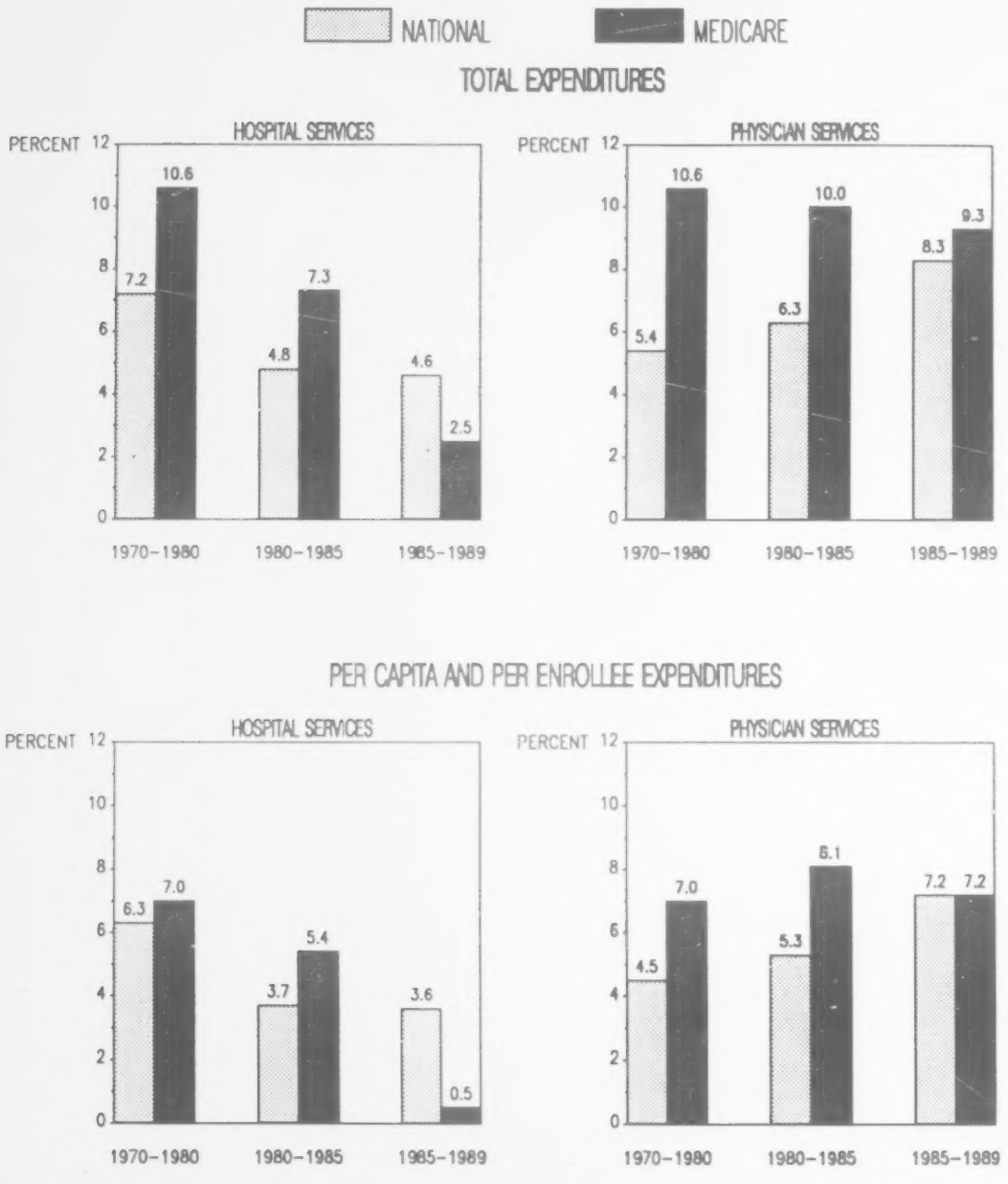
NOTE: Real expenditures are in 1989 dollars, using the GNP fixed-weighted deflator.

Figure 33. Average Annual Growth Rates of Real National and Medicare Expenditures for Hospital and Physician Services, Total and Per Capita, 1970-1989

Medicare expenditures for hospital services increased more rapidly than national expenditures during the 1970-1980 period and the 1980-1985 period, on both a total and per capita basis. From 1985 through 1989, however, Medicare hospital spending per enrollee rose only .5 percent annually, while national spending per capita for hospital services increased 3.6 percent annually.

Medicare's experience with physician spending does not parallel the patterns observed for hospitals. The average annual rate of increase in real spending for physicians' services has historically been higher for Medicare than for the nation, with total Medicare expenditures growing at an annual real rate of about 10 percent between 1970 and 1985, compared with a 5.4 percent annual increase nationally for the 1970-1980 period and a 6.3 percent rate in the 1980-1985 period. From 1985-1989, real national spending for physician services grew at an average annual rate of 8.3 percent, compared to 9.3 percent for Medicare.

FIGURE 33. AVERAGE ANNUAL GROWTH RATES OF REAL NATIONAL AND MEDICARE EXPENDITURES FOR HOSPITAL AND PHYSICIAN SERVICES, TOTAL AND PER CAPITA, 1970–1989



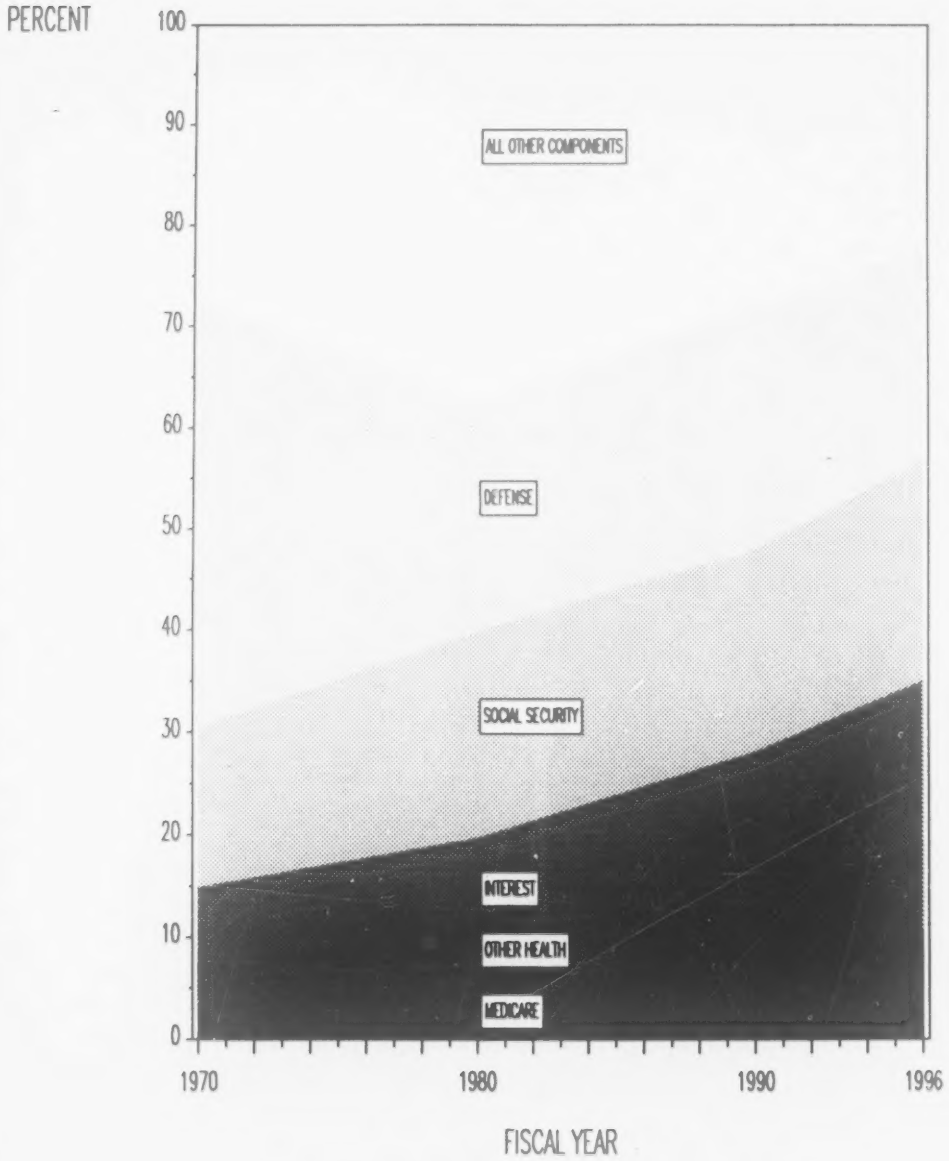
SOURCE: Congressional Budget Office calculations based on data from the Health Care Financing Administration, Office of the Actuary, 1991.

NOTE: Real expenditures are in 1989 dollars, using the GNP fixed-weighted deflator.

Figure 34. Selected Components of the Federal Budget 1970-1996 (in percent)

In 1970, Medicare spending accounted for 3.6 percent of the Federal budget; by 1990, it grew to 7.8 percent. The Congressional Budget Office projects that it will account for 10.8 percent of the Federal budget by 1996. Other Federal health spending, which includes Medicaid, veterans' health care, other health services and health research (but excludes health care outlays in the Department of Defense) accounted for 4 percent of the Federal budget in 1970. By 1996, it is expected to more than double, to 8.7 percent. By comparison, defense spending accounted for 41.8 percent of the budget in 1970 and 23.9 percent in 1990. It is projected to fall to 21.0 percent of the total budget by 1996.

FIGURE 34. SELECTED COMPONENTS OF THE FEDERAL BUDGET, 1970–1996 (In percent)



SOURCE : Congressional Budget Office calculations, March 1991, based on actual outlays in 1970, 1980, and 1990, and projections of outlays in 1996 by CBO baseline without discretionary caps.

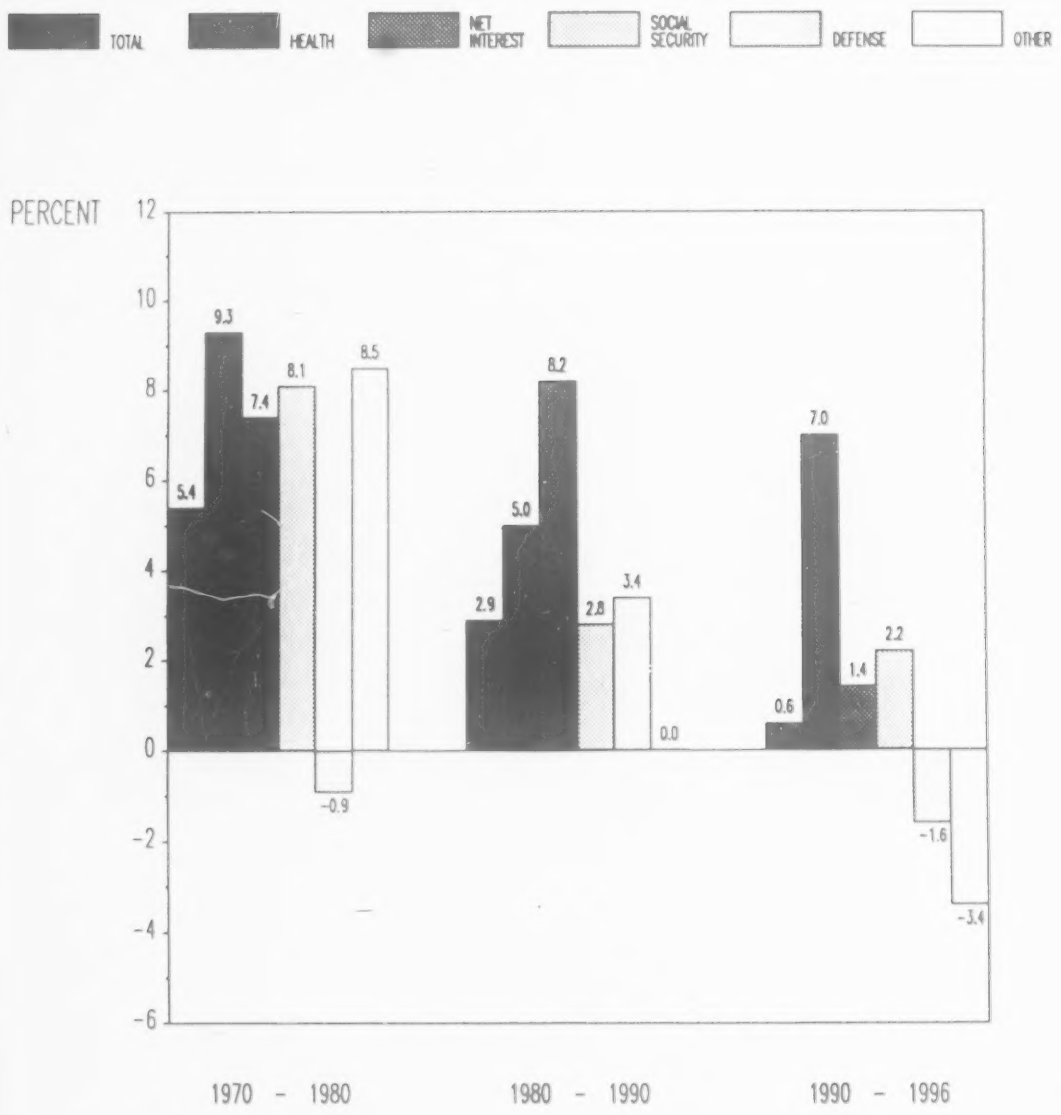
NOTES: In this figure, labels refer to spending measured by the height of the individual shaded portions, not the height from the bottom of the graph.

"Other Health" includes Medicaid, veterans health care, other health services, and health research, and excludes health care outlays in the Department of Defense.

Figure 35. Average Annual Rates of Growth of Real Federal Outlays, Selected Components, 1970-1996

Between 1970 and 1980, the average annual rate of growth in real spending in the Federal budget was 5.4 percent; between 1980 and 1990, it grew an average of 2.9 percent a year. The Congressional Budget Office projects that the Federal budget will increase only .6 percent a year from 1990-1996 in real terms. Health spending in the Federal budget grew at consistently higher rates during those periods, and is projected to increase faster than overall Federal spending through 1996. From 1970-1980, real Federal health spending grew at an average annual rate of 9.3 percent; between 1980 and 1990, it grew 5.0 percent. From 1990-1996, real Federal health spending is projected to grow at an average of 7.0 percent a year.

FIGURE 35. AVERAGE ANNUAL RATES OF GROWTH OF REAL FEDERAL OUTLAYS, SELECTED COMPONENTS, 1970–1996



SOURCE: Congressional Budget Office calculations, March 1991, based on actual outlays in 1970, 1980, and 1990, and projections of outlays in 1996 by CBO baseline without discretionary caps.

NOTES: Real outlays are in 1989 dollars, using the GNP fixed-weighted deflator. Years are fiscal years.

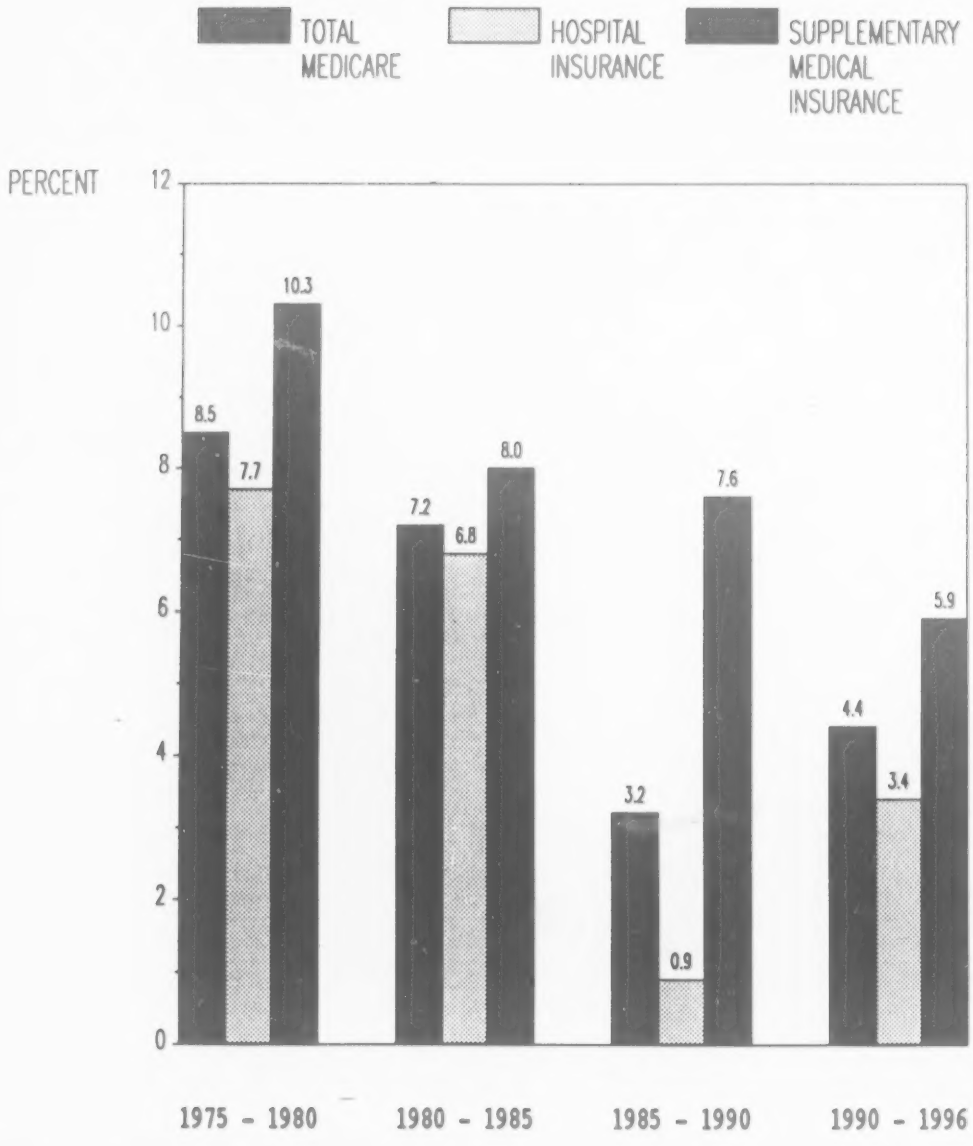
Health care outlays exclude those in the Department of Defense.

Figure 36. Average Annual Growth Rates of Real Medicare Spending, Per Enrollee, By Component, 1975-1996

From 1975 through 1990, Medicare real spending per enrollee grew fastest for Medicare Part B spending--physician and other outpatient spending financed by the Supplementary Medical Insurance (SMI) Trust Fund. From 1975-1980, real SMI spending grew an average of 10.3 percent a year, compared to 7.7 percent for Medicare Part A spending for inpatient hospital services financed by the Hospital Insurance (HI) Trust Fund. From 1980 to 1985, real SMI spending grew an average of 8 percent a year, compared to 6.8 percent for HI spending.

The difference in growth rates was most dramatic from 1985 to 1990, when real SMI spending grew an average of 7.6 percent a year, compared to less than one percent for HI spending. From 1990 to 1996, the Congressional Budget Office projects that real SMI spending will grow an average of 5.9 percent a year, and real HI spending will grow 3.4 percent a year.

FIGURE 36. AVERAGE ANNUAL GROWTH RATES OF REAL MEDICARE SPENDING PER ENROLLEE, BY COMPONENT, 1975–1996.



SOURCE: Congressional Budget Office calculations, March 1991, based on actual outlays in 1975, 1980, 1985, and 1990, and projections of federal outlays in 1996 by CBO baseline without discretionary caps.

NOTE: Real expenditures are in 1989 dollars, using the GNP fixed-weighted deflator.
Years are fiscal years.

Health Insurance

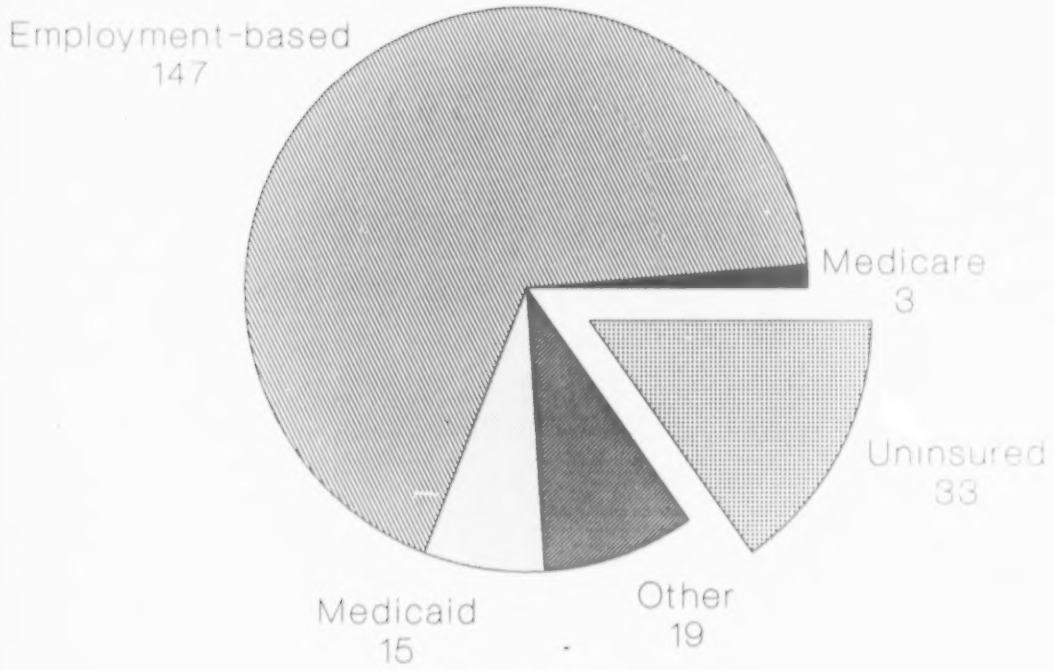
Figure 37: Primary Sources of Health Coverage for Persons Under Age 65, 1989

In 1989, an estimated 85 percent of the noninstitutionalized population under age 65 had public or private coverage during at least part of the year. Employer plans covered 147 million Americans in 1989, or over two-thirds of the nonaged population. Persons covered under employer plans are almost equally divided between those obtaining coverage through their own work (72 million) and those obtaining coverage as dependents on another family member's policy (75.7 million).

Estimates in Figures 37 through 47 are based on an analysis of the March 1990 Current Population Survey (CPS), a household survey conducted by the Census Bureau of the Department of Commerce. Each year's March CPS asks whether persons had coverage from selected sources of health insurance at any time during the preceding calendar year. Respondents could have more than one kind of insurance during a year. Except as noted, the figures assign an individual to one primary source of coverage, on the basis of which coverage would usually be primary under medical claims payment rules.

Figure 37: Primary Sources of Health Coverage for Persons under Age 65, 1989

Persons covered in millions.



Source: CRS analysis of March 1990 Current Population Survey

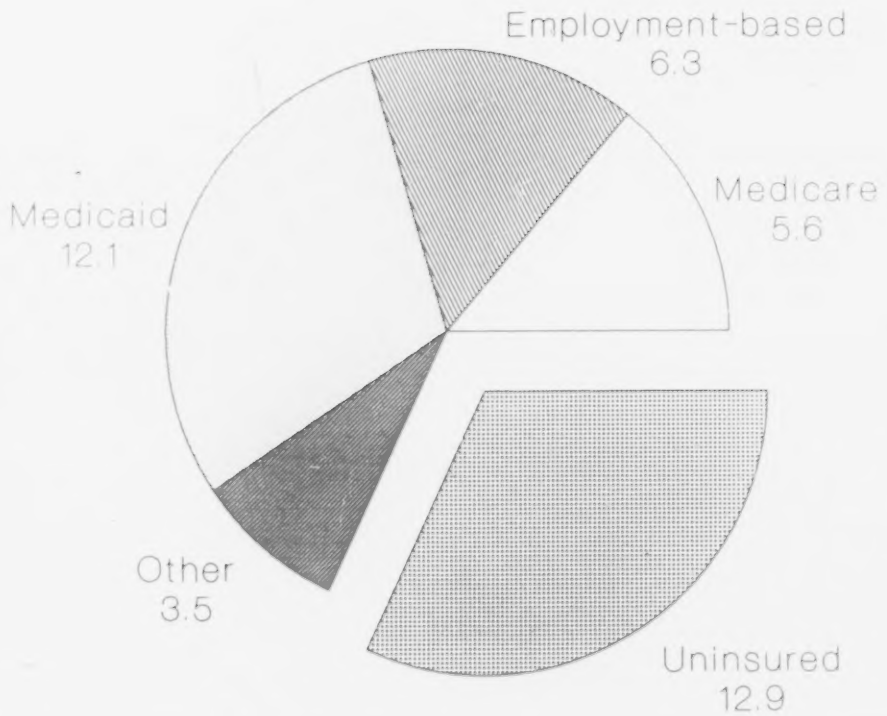
Figure 38: Primary Sources of Health Coverage, Persons in Poverty, 1989

Persons with incomes below the Federal poverty level are less likely than higher-income persons to have coverage; those who do have coverage are more likely to rely on Medicaid or on the sources of insurance classed as "other." These include non-employer based private coverage, CHAMPUS, and State and local indigent care programs, and miscellaneous other sources of coverage. Note that this figure includes persons over 65, most of whom have Medicare.

For purposes of computing income, individuals have been assigned to "insurance units," groupings that meet the typical private insurance definition of a "family." Incomes of these units were then compared to the 1989 Federal poverty levels for families of the same size. (For a family of four, this figure was $12,675 in 1989.)

Figure 38: Primary Sources of Health Coverage, Persons in Poverty, 1989

Persons covered in millions.



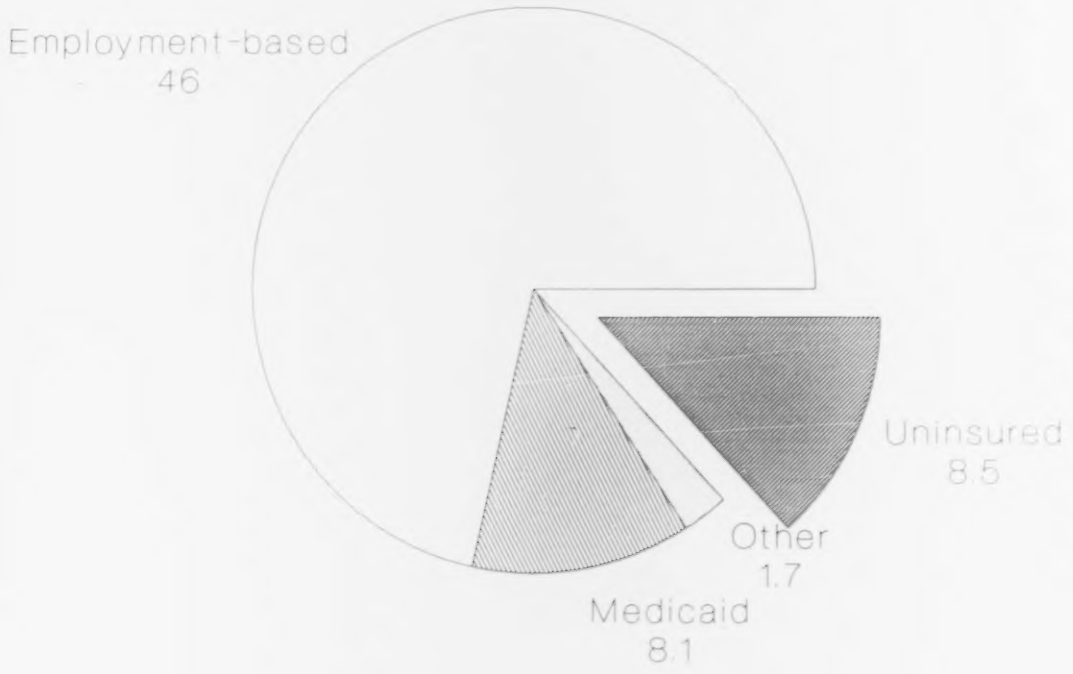
Source: CRS analysis of March 1990 Current Population Survey

Figure 39: Primary Sources of Health Coverage for Children Under Age 18, 1989

Most children are covered as dependents under a parent's work-based coverage. Medicaid is the second most important source of coverage for children, and even more children are expected to receive Medicaid as a result of expansions enacted in 1989 and 1990. While 13 percent of all children had no insurance during 1989, the rate of uninsurance is twice as high for those under poverty. All poor children will eventually be eligible for Medicaid under the phased-in OBRA 90 expansions.

Figure 39: Primary Sources of Health Coverage for Children under Age 18, 1989

Persons covered in millions.



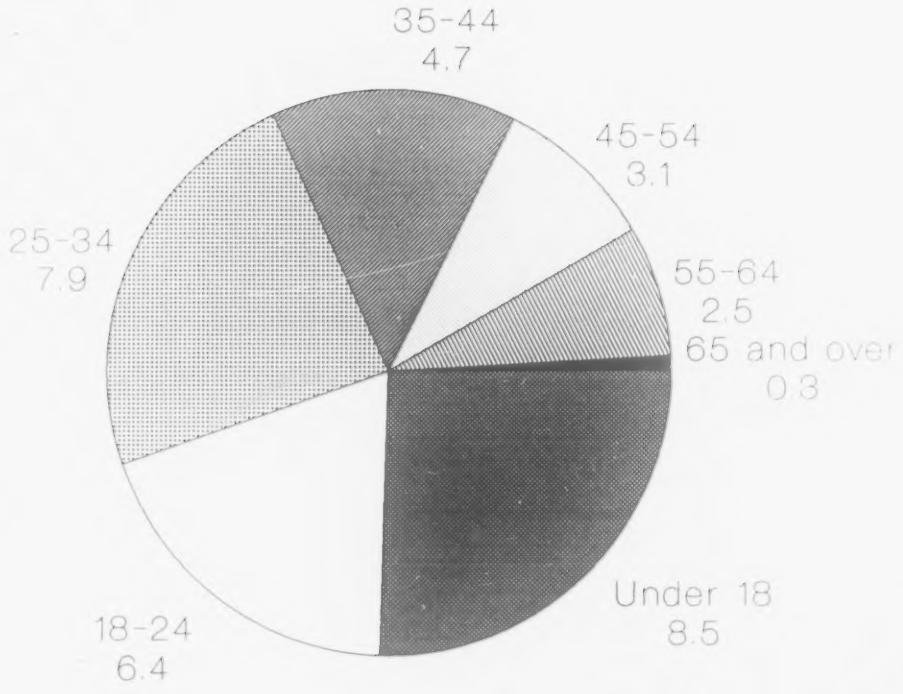
Source: CRS analysis of March 1990 Current Population Survey

Figure 40: Population Without Health Coverage by Age, 1989

Nearly half the uninsured in 1989 -- 45 percent -- were under age 24. Children accounted for 26 percent of the uninsured, and young adults for another 19 percent. Older adults make up a much smaller proportion of the uninsured. However, because they are likely to require more health services, they may contribute disproportionately to such problems as uncompensated care in hospitals.

Figure 40: Population without Health Coverage by Age, 1989

Persons in millions.



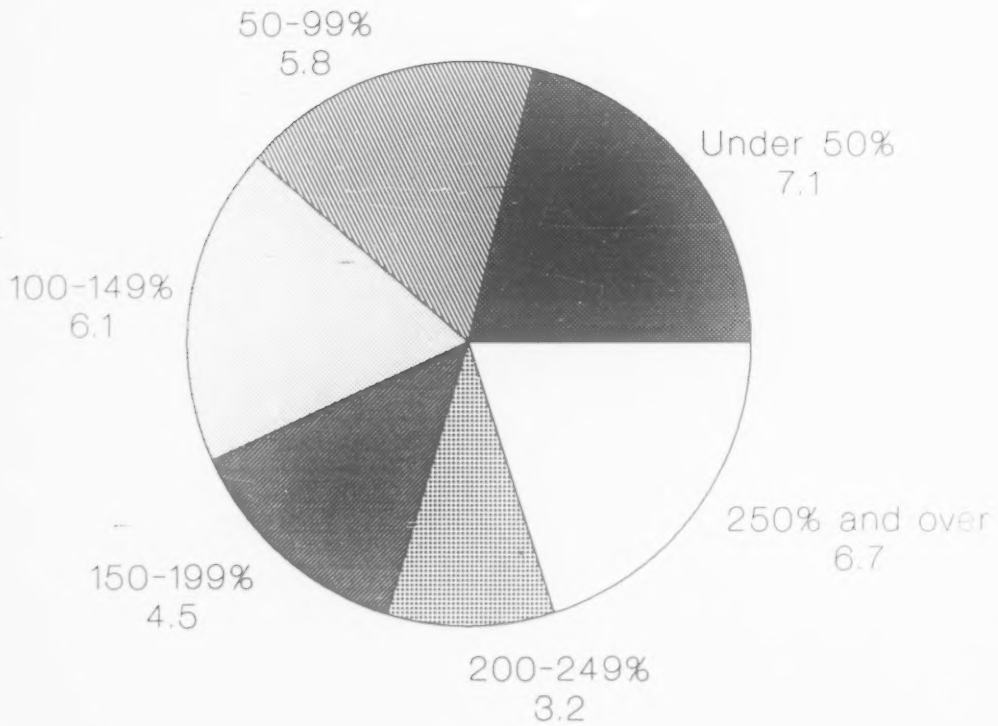
Source: CRS analysis of March 1990 Current Population Survey

Figure 41: Population Without Health Coverage by Income, 1989

Persons with incomes below the Federal poverty level account for 39 percent of the uninsured population, and another 32 percent have incomes between 100 and 200 percent of poverty. Despite the strong association of income and insurance status, nearly one in five uninsured persons has an income of 250 percent of poverty or more. In this income group, even more than in the others, the rate of uninsurance peaks among young adults; those aged 18 to 24 are twice as likely as other higher-income persons to lack insurance.

Figure 41: Population without Health Coverage by Income, 1989

Persons in millions.



Income as a Percent of Federal Poverty Level

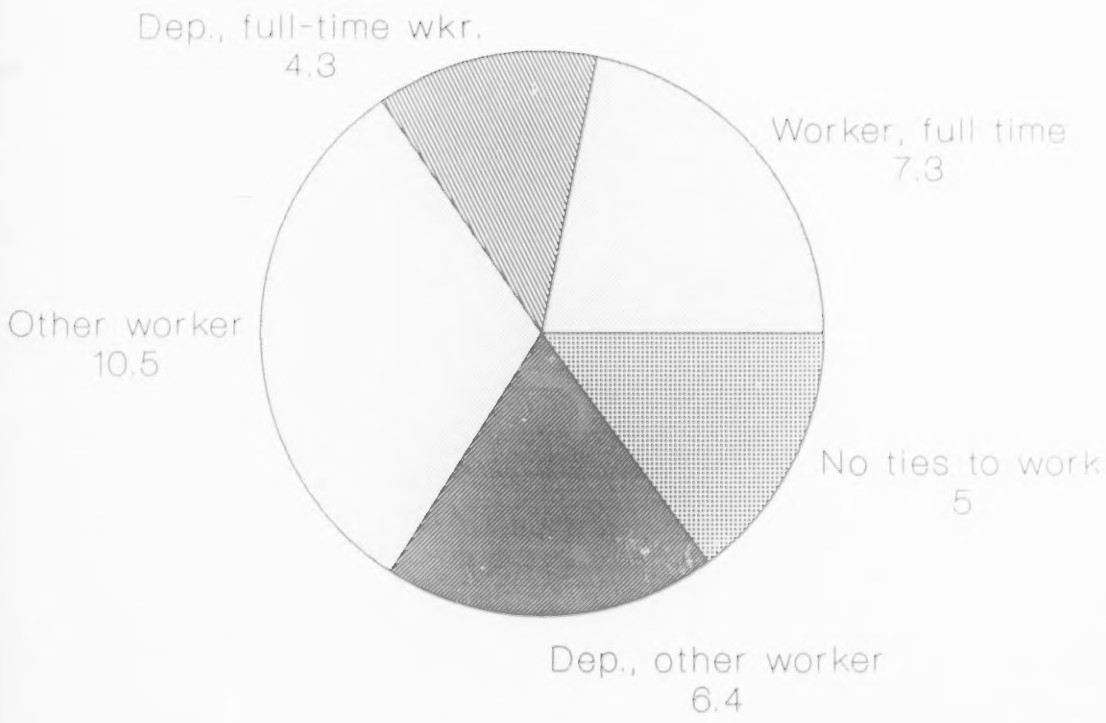
Source: CRS analysis of March 1990 Current Population Survey

Figure 42: Population Without Health Coverage by Ties to Work Force, 1989

One in three uninsured persons worked full time throughout 1989, or was a dependent of such a worker. Workers who worked only part time or only during part of the year were more likely to lack coverage. Employers who cover their full time employees generally have a minimum hours-per-week threshold for coverage, while seasonal industries often provide no coverage. Only 5 million of the uninsured, fewer than one in six, had no ties to the work force at any time during the year.

Figure 42: Population without Health Coverage by Ties to Work Force, 1989

Workers and dependents (millions)



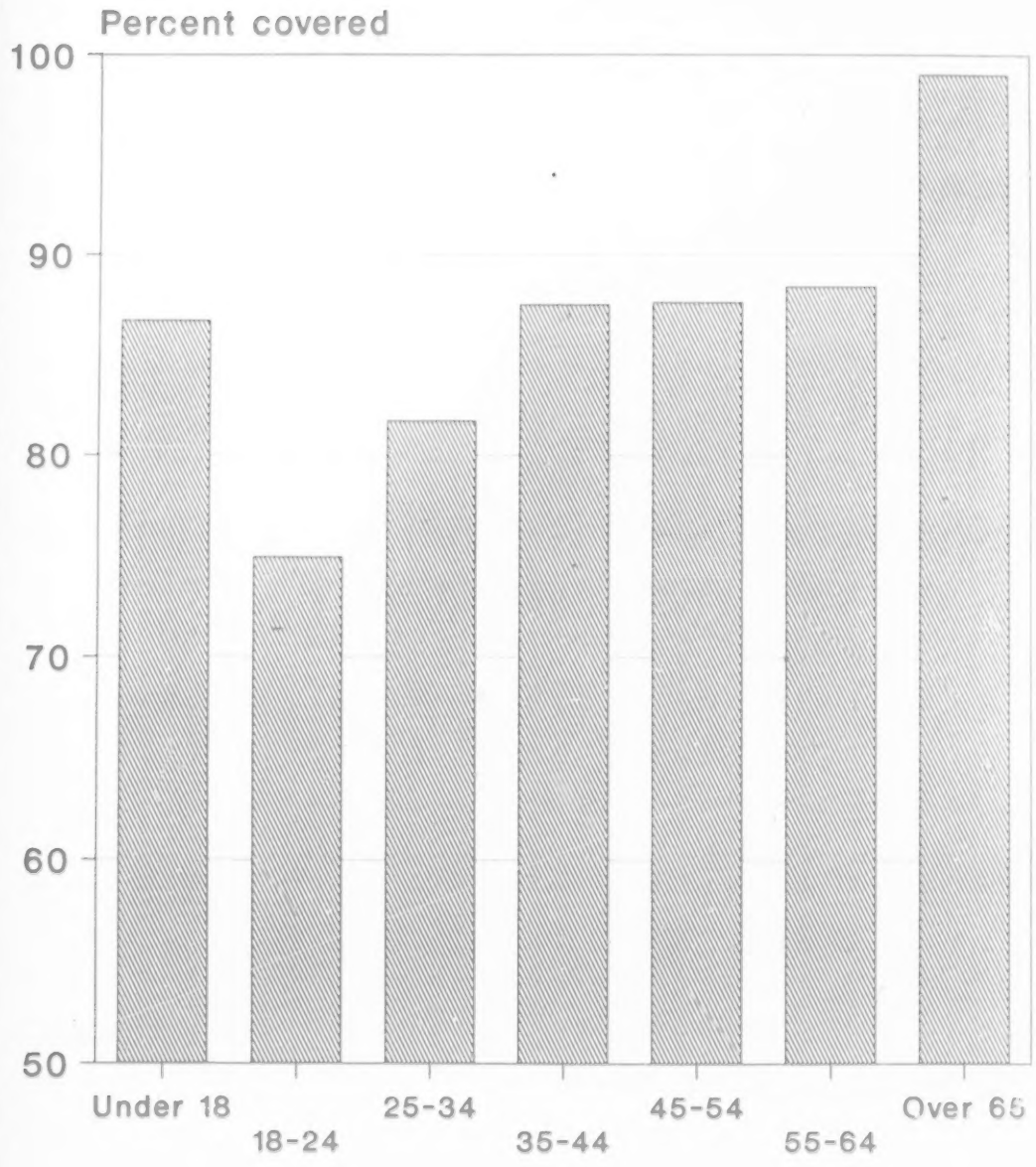
Note: full-time workers worked at least 35 hours per week for at least 50 weeks.

Source: CRS analysis of March 1990 Current Population Survey

Figure 43: Rate of Health Insurance Coverage by Age, 1989

The rate of insurance coverage is lowest among young adults. Over 25 percent of persons ages 18 to 24 were without coverage in 1989. Young adults may be unemployed or in entry level jobs that do not offer coverage. If they are still living at home, they may not be counted as dependent children for the purposes of either private insurance or Medicaid. Over the next several age groups, coverage rates increase, chiefly because older workers are more likely to obtain insurance through their own employment. Finally, the availability of Medicare to most individuals aged 65 and over meant that less than 1 percent of this group was uninsured.

Figure 43: Rate of Health Insurance Coverage by Age, 1989

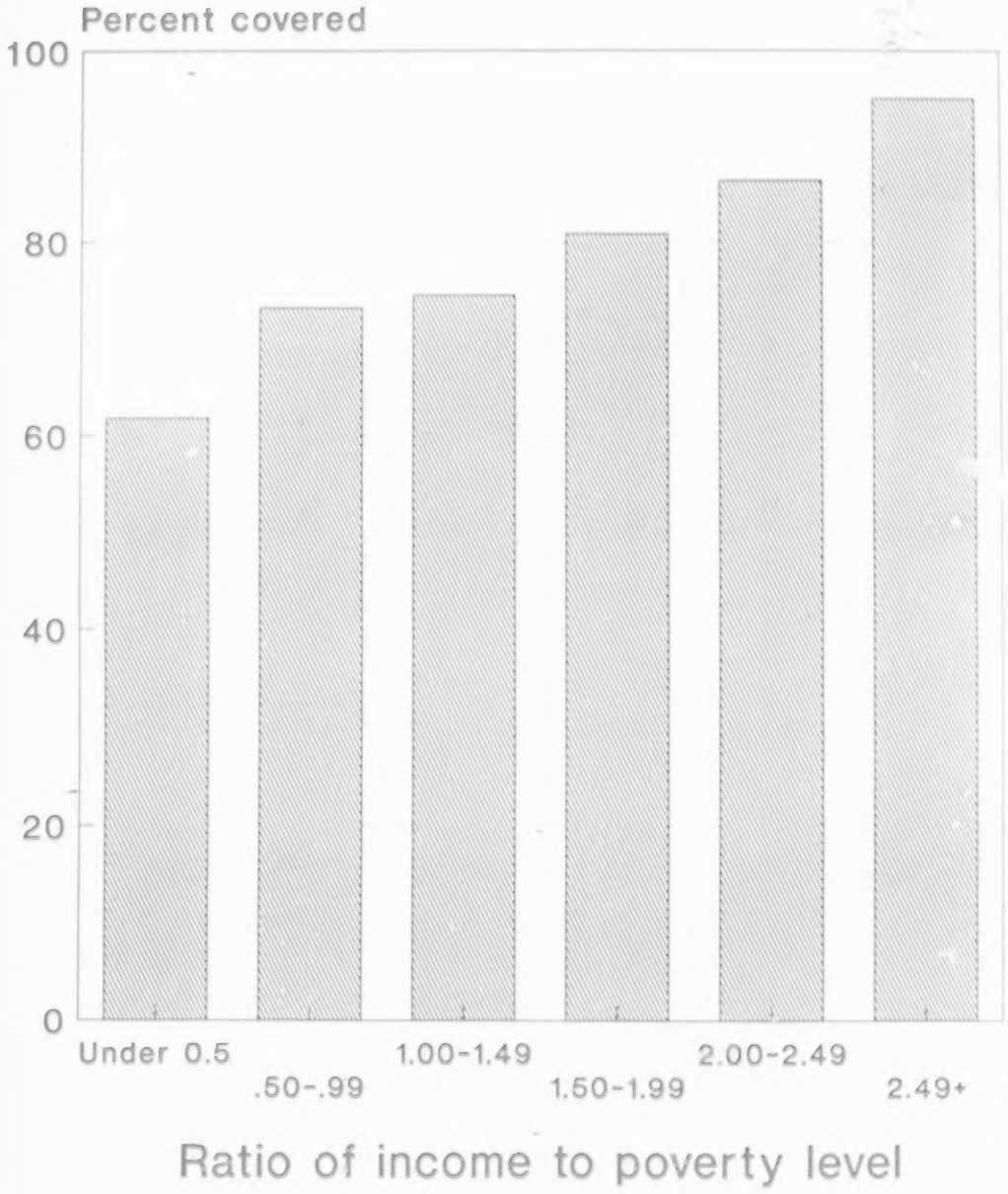


Source: CRS Analysis of March 1990 Current Population Survey

Figure 44: Rate of Health Insurance Coverage by Income, 1989

Persons with incomes over 250 percent of the poverty level are more than half again as likely to have health insurance as the poorest Americans, those with incomes below 50 percent of poverty. Only 62 percent of those in the lowest income group had coverage in 1989. Some of the uninsured poor may be excluded from Medicaid because they fail to meet categorical standards, which generally limit coverage to the aged, disabled, and families with children. Others may have incomes exceeding Medicaid limits, which in some States can be as low as 13 percent of the poverty level.

Figure 44: Rate of Health Insurance Coverage by Income, 1989



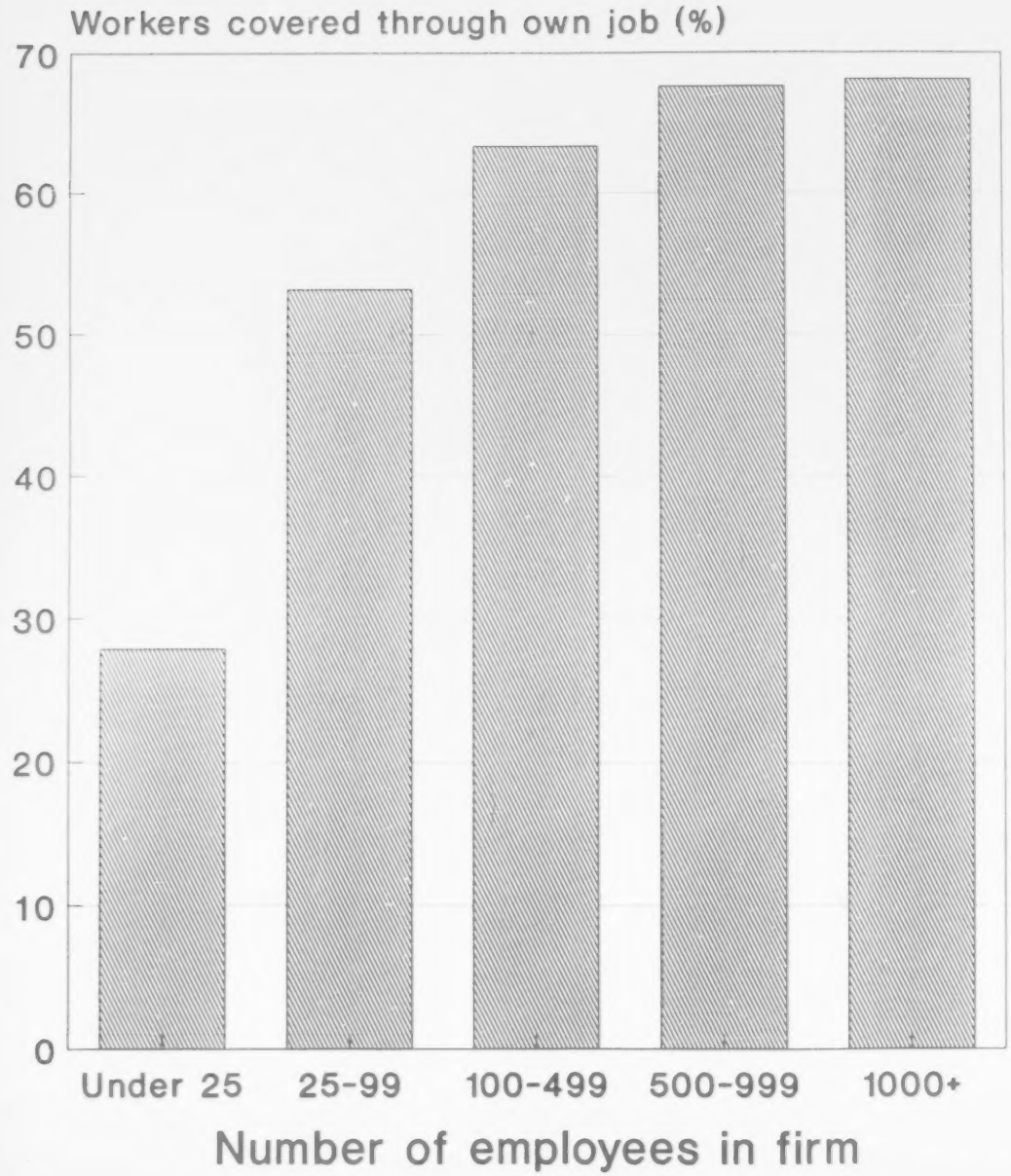
Source: CRS analysis of March 1990 Current Population Survey

50-590 0 - 91 - 4

Figure 45: Rate of Health Insurance Coverage by Size of Employer, 1989

The likelihood that a worker will obtain coverage through his or her own employment varies with the size of the employer. A Health Insurance Association of America (HIAA) survey in 1989 found that only 26 percent of firms with fewer than 5 employees offered health benefits, and only 54 percent of firms with 5 to 9 employees. In contrast, 99 percent of firms with 100 or more workers provided coverage in 1989. Note that workers who do not obtain coverage through their own employment may be insured in some other way, such as through a spouse's work-based coverage. This and the next figure show only the extent to which workers were covered through their own jobs.

Figure 45: Rate of Health Insurance Coverage by Size of Employer, 1989

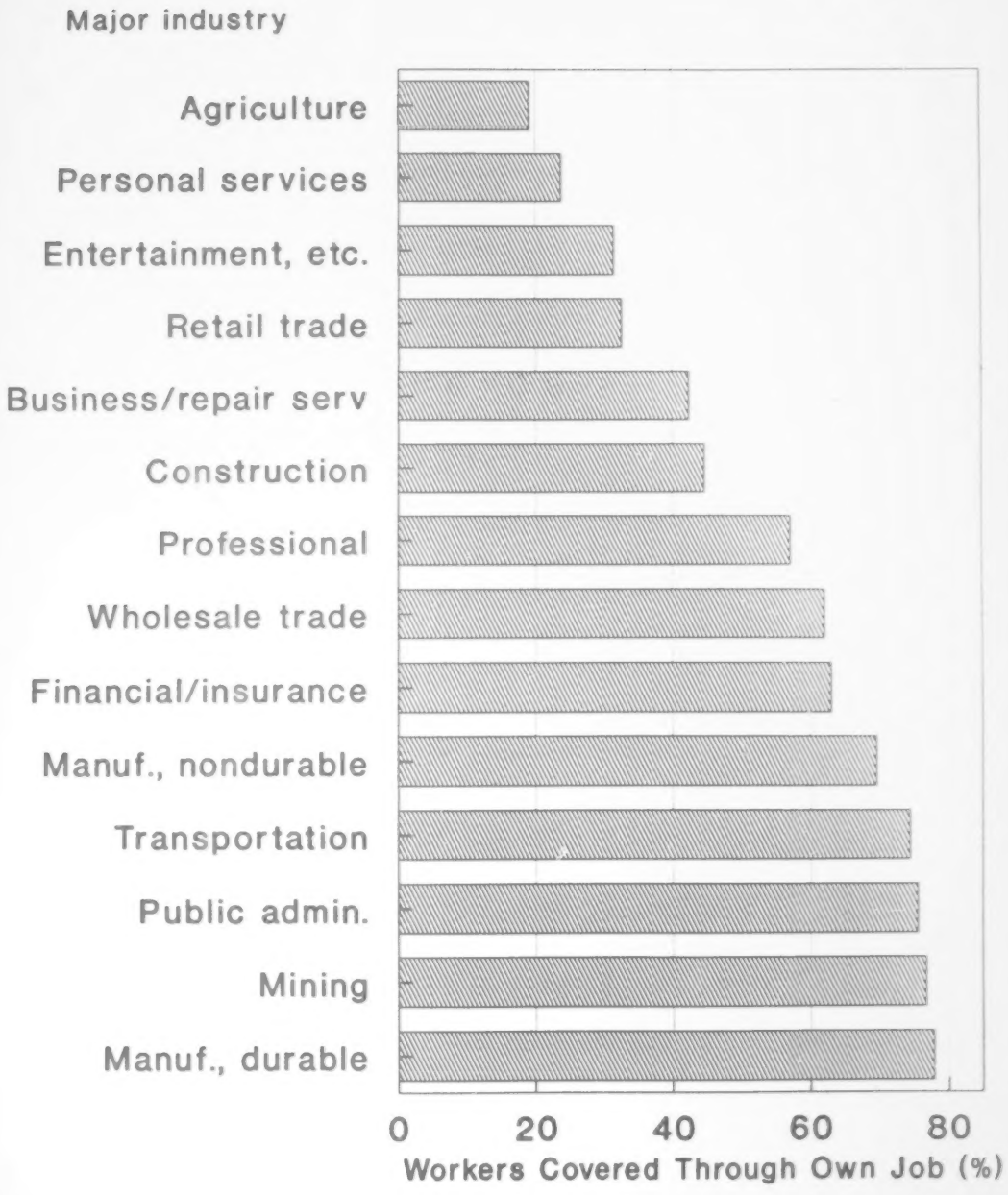


Source: CRS analysis of March 1990 Current Population Survey

Figure 46: Rate of Health Insurance Coverage by Type of Industry, 1989

Industry type is also a strong determinant of coverage, though this factor may overlap with firm size. Workers in agriculture, personal services, and entertainment and recreation were least likely to have coverage through their own jobs in 1989, while those in public administration, mining, and manufacturing (durable goods) were most likely. Coverage is more prevalent in industries where benefits are established through collective bargaining. On the other hand, industries with a high proportion of seasonal or part-time workers are likely to have lower coverage rates.

Figure 46: Rate of Health Insurance Coverage by Type of Industry, 1989

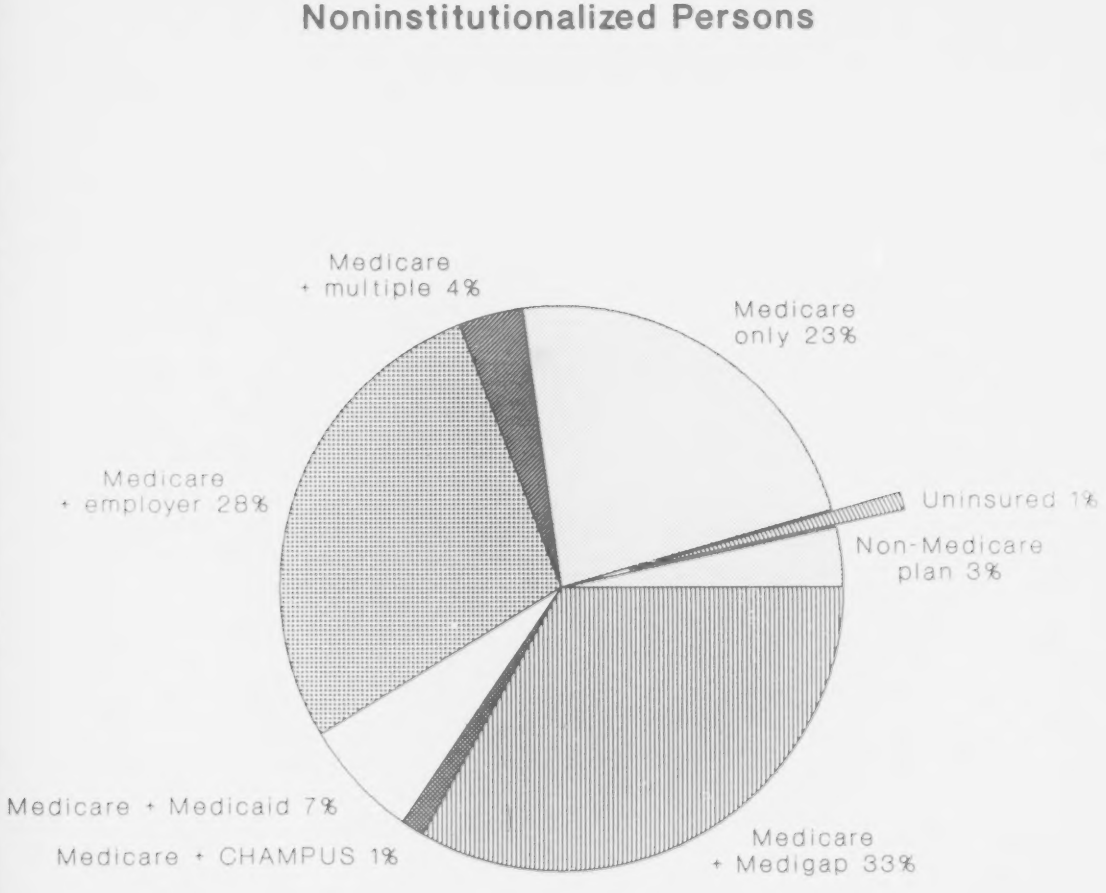


Source: CRS analysis of March 1990 Current Population Survey

Figure 47: Sources of Health Care Coverage, Persons Age 65 and Over, 1989

Nearly all elderly Americans have health insurance, chiefly through Medicare. About 3 percent of the elderly rely on non-Medicare coverage. These include Federal workers who retired before Medicare was required for Federal employees and who are therefore covered under the Federal Employees Health Benefit Program. Of the elderly covered by Medicare, 76 percent have some form of supplemental coverage. Most have retiree benefits or purchase private Medigap coverage on their own, while the low-income elderly may receive Medicaid. About 4 percent have more than one type of supplemental coverage; note that this figure does not include those who have duplicate coverage within one coverage type, such as persons with multiple Medigap policies.

Figure 47: Sources of Health Care Coverage, Persons Age 65 and Over, 1989

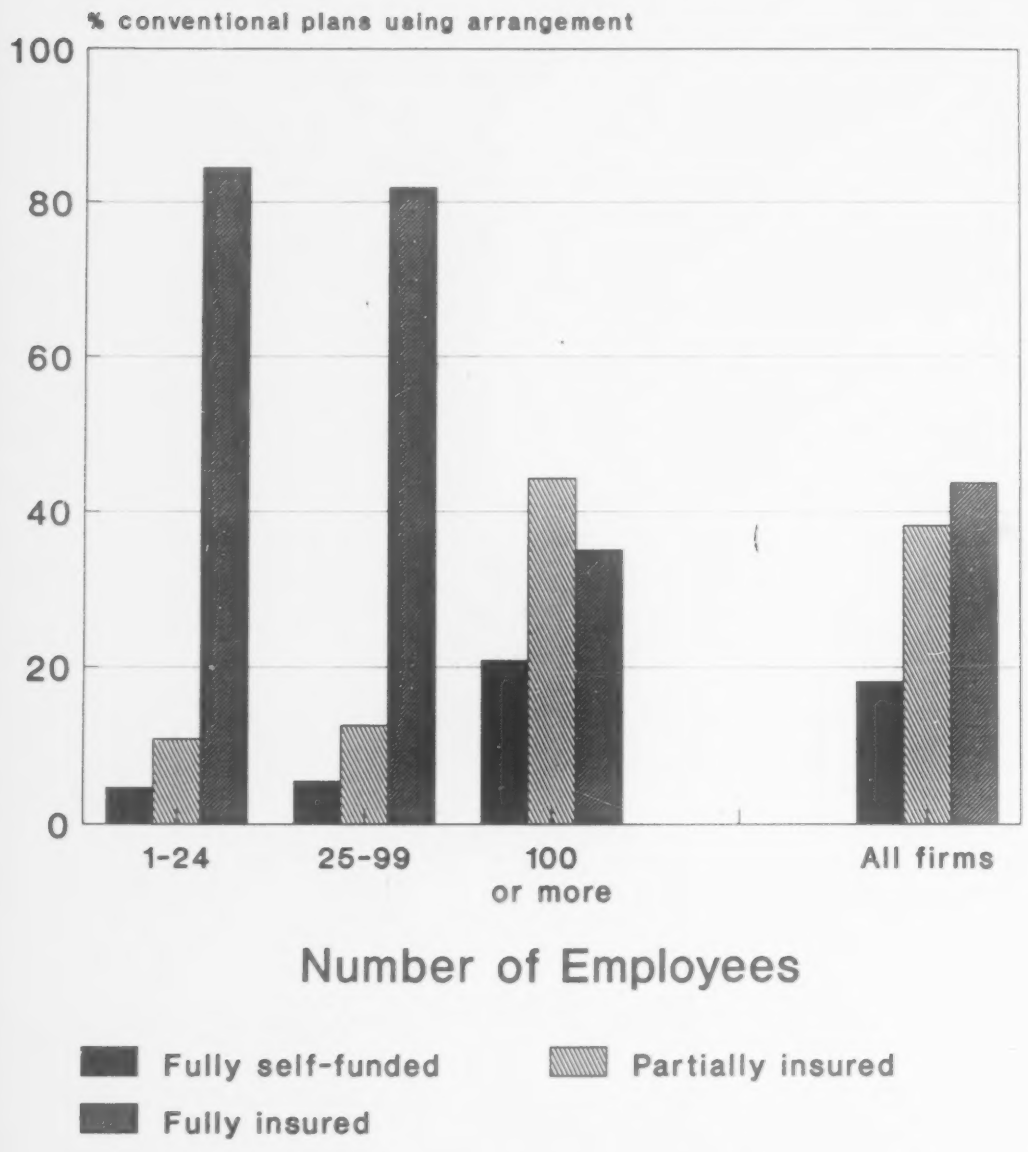


Source: CRS analysis of March 1990 Current Population Survey

Figure 48: Insurance Funding Arrangement by Firm Size, 1990

One major trend in employer health benefit plans in recent years is a shift towards self-insurance, under which an employer directly assumes the financial risk for health care costs incurred by their employees. A self-insured firm may use an insurance company only to perform administrative tasks, such as claims processing, or it may carry on these functions in-house. Some firms are "partially insured"; they retain responsibility for most health care costs but buy protection for extraordinary expenses. Because of the financial risks involved, smaller firms are more likely to buy full coverage from a health insurance company. Note that the figure shows only those firms that offer health benefits and does not include plans covered through health maintenance organizations (HMOs), which are almost always fully insured arrangements.

Figure 48: Insurance Funding Arrangement by Firm Size, 1990



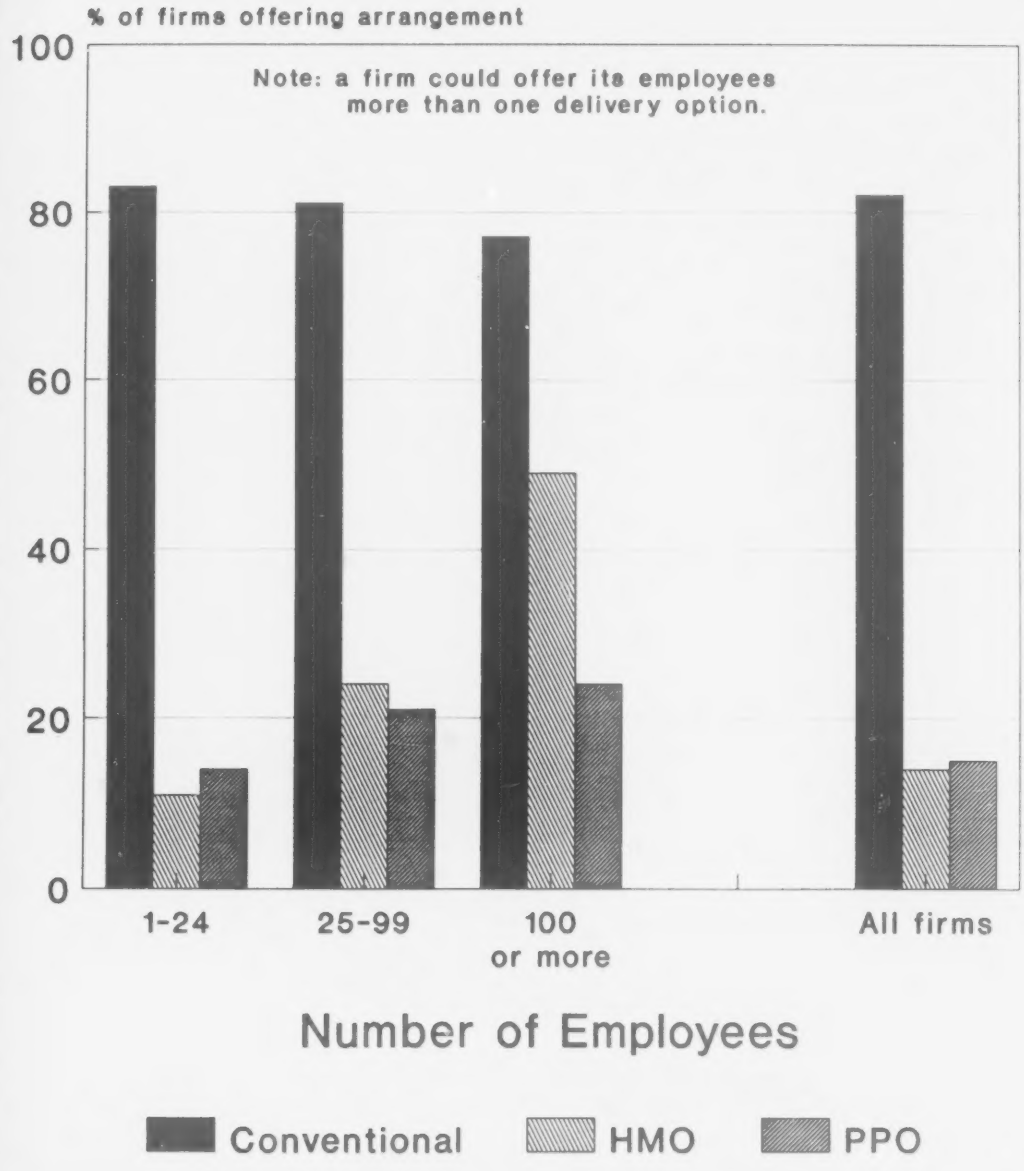
Source: Health Insurance Association of America Employer Survey, 1990

50-590 0 - 91 - 5

Figure 49: Percent of Firms Using Alternate Delivery Models, 1989

A second major trend in the last two decades has been the growth of alternatives to traditional fee-for-service plans. Traditional plans provide uniform service coverage regardless of the particular medical providers used. Health maintenance organizations (HMOs) and preferred provider organizations (PPOs) establish networks of affiliated providers; some HMOs employ physicians directly or own hospitals. An HMO will cover only services obtained through its own providers, except in an emergency. A PPO will cover non-network services, but provides financial incentives to use network providers. Use of the newer arrangements is more common in larger firms. Note that many firms offer a choice of plans to their workers; such a firm may appear in more than one category in the figure.

Figure 49: Percent of Firms Using Alternate Delivery Models, 1989

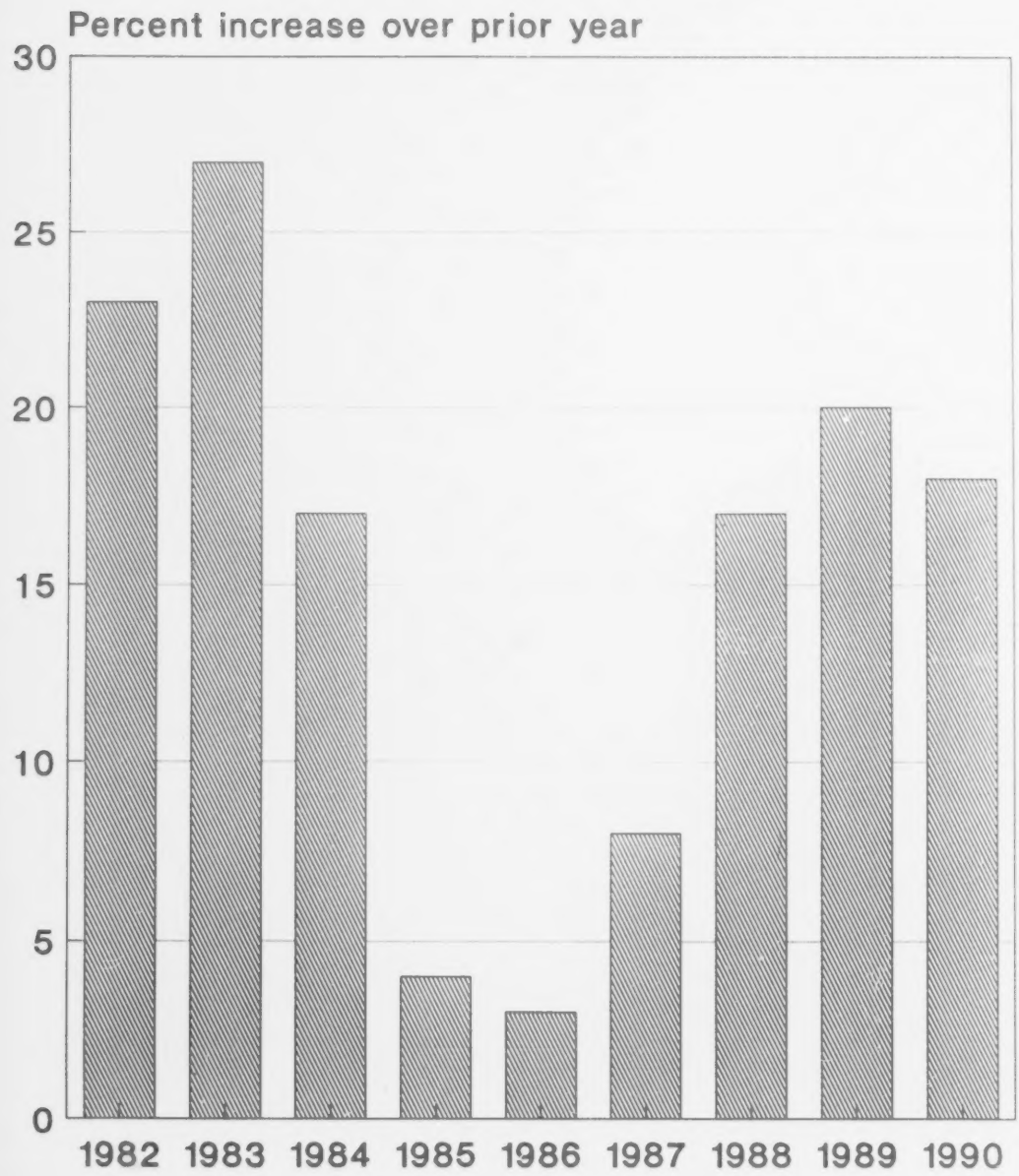


Source: Health Insurance Association of America Employer Survey, 1989

Figure 50: Increase in Average Health Insurance Premium, 1982-90

Surveys of employers and insurers indicate that private health insurance premiums have risen sharply in the last several years. The figure represents the average annual increases reported in one survey of medium to large employers during the 1980s. Over the long term, health insurance premiums are thought to be subject to an "underwriting cycle," with periods of high rate increases alternating with periods of more moderate growth. Whether the high cycle of recent years has now peaked is not yet clear.

Figure 50: Increase in Average Health Insurance Premium, 1982-90

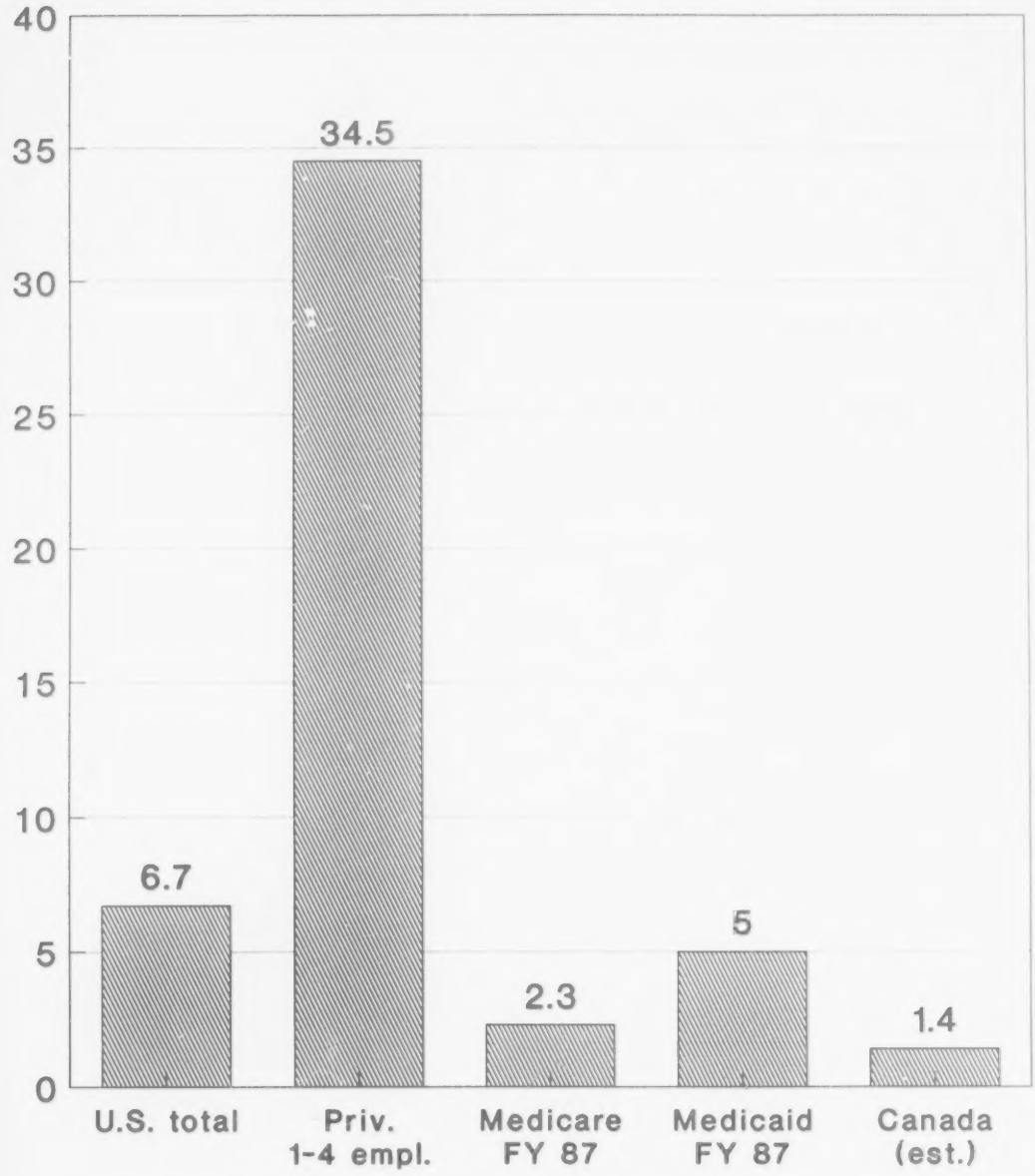


Source: Hay/Huggins Benefits Report

Figure 51: Administrative Costs as a Percent of Benefits, Various Programs, 1987

The costs of any insurance program include administration, as well as direct service costs. Public programs generally have lower costs than private ones. Medicaid has somewhat higher costs than Medicare or the Canadian provincial programs, in part because of the expense of determining program eligibility. Among private insurance plans, individual coverage and coverage in small firms involves a higher administrative "loading" than large group coverage. Note that the U.S. total and Canadian figures represent combined public and private administrative costs (and private insurers' net earnings) relative to total personal health expenditures.

Figure 51: Administrative Cost as % of Benefits, Various Programs, 1987

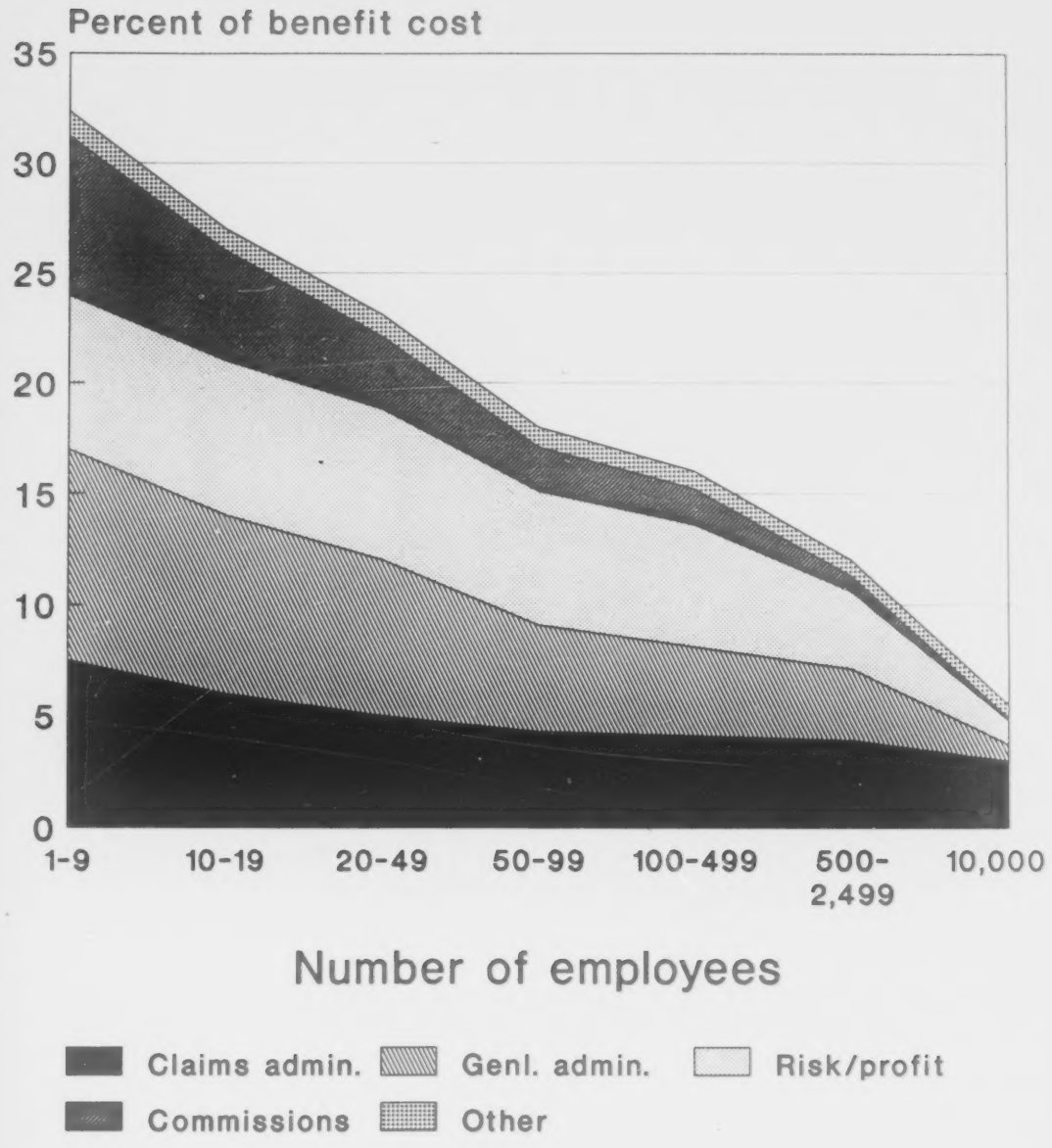


Source: CRS analysis of data from the Health Care Financing Administration, Hay/Huggins Co., and Health and Welfare Canada

Figure 52: Administrative Costs as a Percent of Benefit Costs by Size of Firm

Administrative costs are higher for small groups than for larger ones, for several reasons. First, certain fixed costs, such as the costs of selling the policy, must be spread across a smaller number of members. Second, the insurer must perform some functions for small groups, such as member communications, that are commonly assumed by the employer in larger groups. Third, insurers commonly retain a higher proportion of small group premiums as reserves. Finally, there are some costs that are unique to the small group market. For example, if an insurer engages in medical underwriting for small groups, the costs of that activity will be reflected in the rates charged to those groups. In addition, there are some costs that apply only to groups that purchase insurance coverage and are not incurred by employers who choose to self insure. Self-insured plans entail no marketing expense and hence no commissions. They are also exempt from premium taxes.

Figure 52: Administrative Cost As a Percent of Benefit Costs by Size of Firm

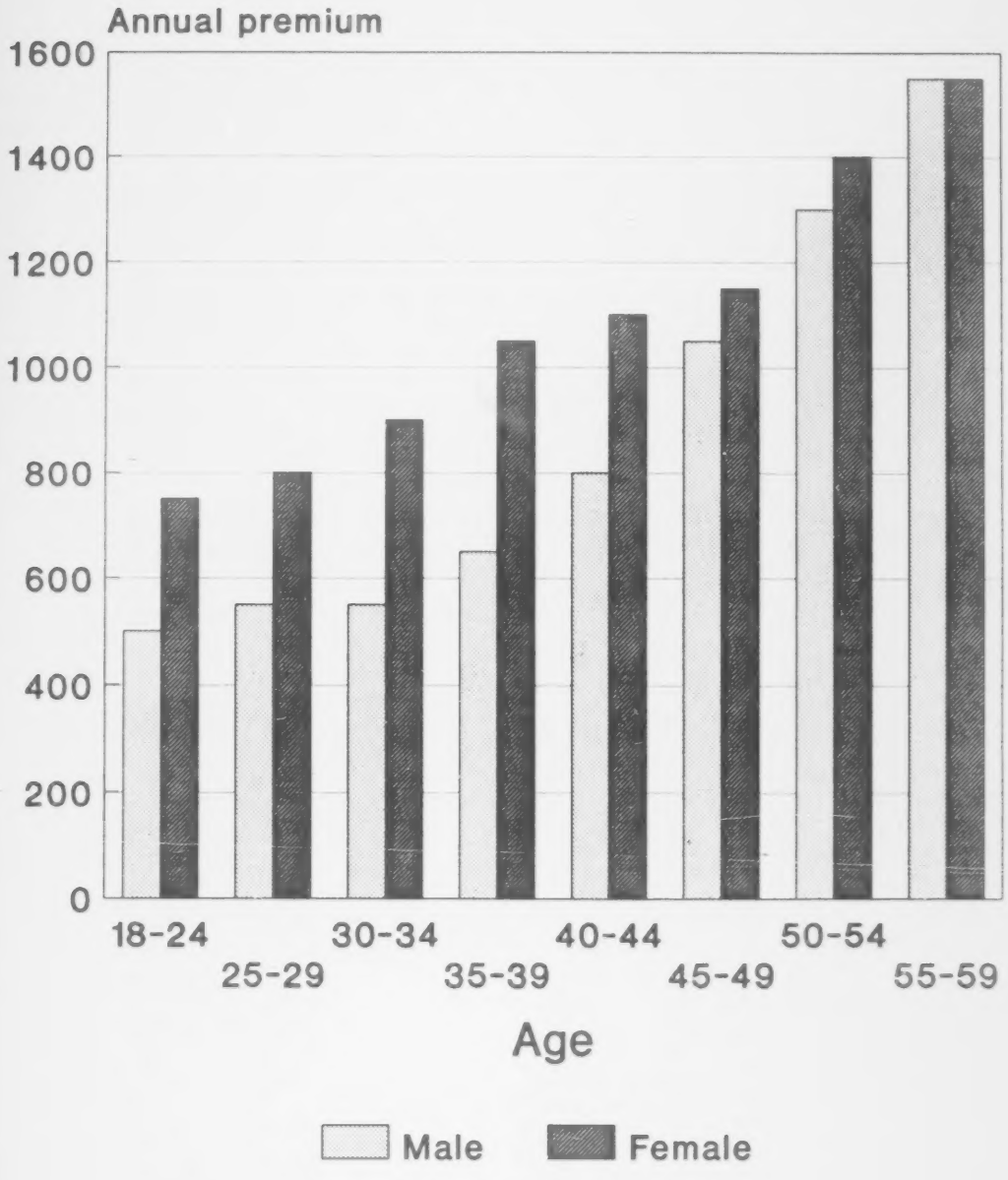


Source: Hay/Huggins Co. estimate, 1987

Figure 53: Typical Age/Sex Premium Range, Plan with Average Value of $1,000

Insurers selling health coverage to small groups charge different premium rates to different firms, depending on characteristics of the firm or its employees. Variables include industry type and location and the age and sex of workers. (Coverage for larger firms is usually "experience rated," with premiums based on the actual costs incurred by the firm's employees during a prior period.) The figure shows a typical range of age/sex variation, based on a number of insurers' rate books. Young women cost more than men of the same age, in part because of costs related to maternity, but this difference narrows among older adults.

Figure 53: Typical Age/Sex Premium Range, Plan with Average Value of $1,000



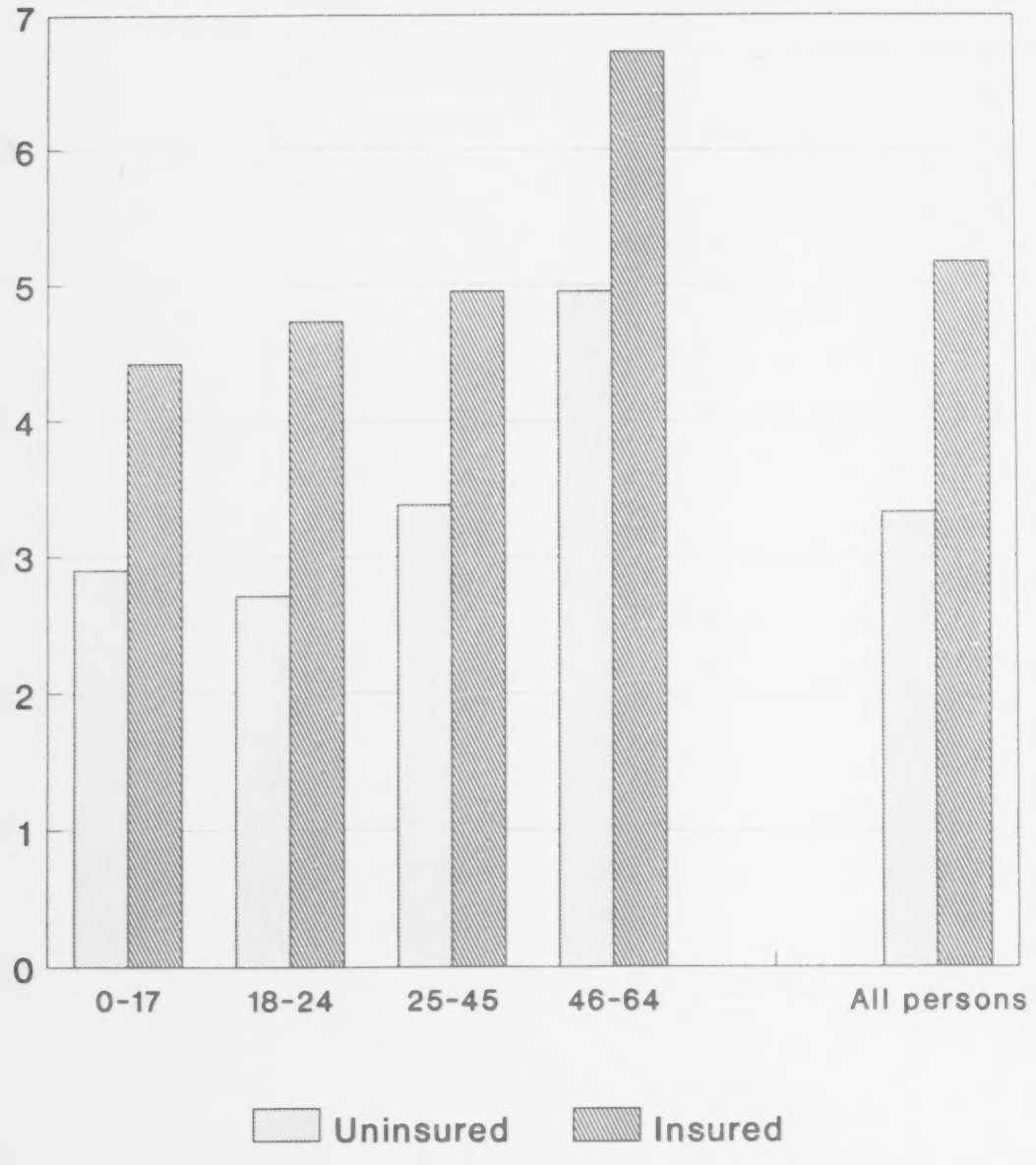
Source: CRS Health Insurance Premium Model

Access and Outcomes

Figure 54: Average Number of Physician Contacts by Age and Insured Status, 1986

The lack of insurance coverage affects both the frequency with which individuals contact a physician and the nature of those contacts. As the figure shows, per capita annual use of physicians rises with age for both the insured and the uninsured, but the uninsured in each age group have fewer physician contacts than the insured. In addition, a greater percentage of the uninsured's contacts occur in settings other than a physician's office, such as hospital outpatient departments and emergency rooms.

Figure 54: Average Number of Physician Contacts by Age and Insured Status, 1986

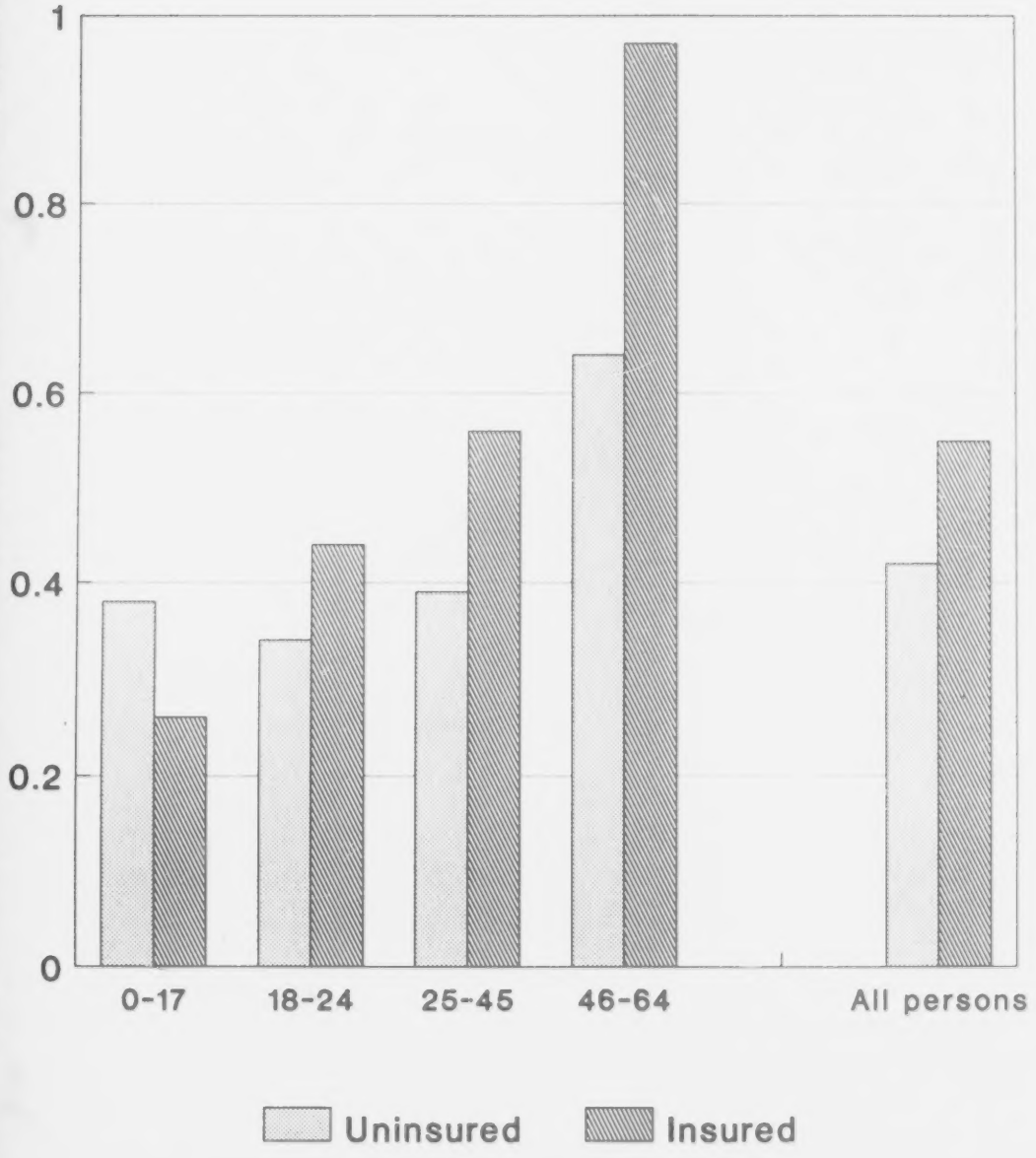


Source: CRS analysis of 1986 National Hlth. Interview Survey

Figure 55: Average Number of Hospital Days by Age and Insured Status, 1986

As in the case of physician services, the uninsured generally spend fewer days per capita in the hospital than the uninsured. Note, however, that the reverse is true for children under age 18. In this age group, the uninsured reported 46 percent more hospital days per capita than the insured in 1986; the reasons are not known. Despite the utilization disparities, the uninsured in all age groups receive a considerable amount of hospital care. One consequence is the growth in uncompensated care shown in the next figure.

Figure 55: Average Number of Hospital Days by Age and Insured Status, 1986

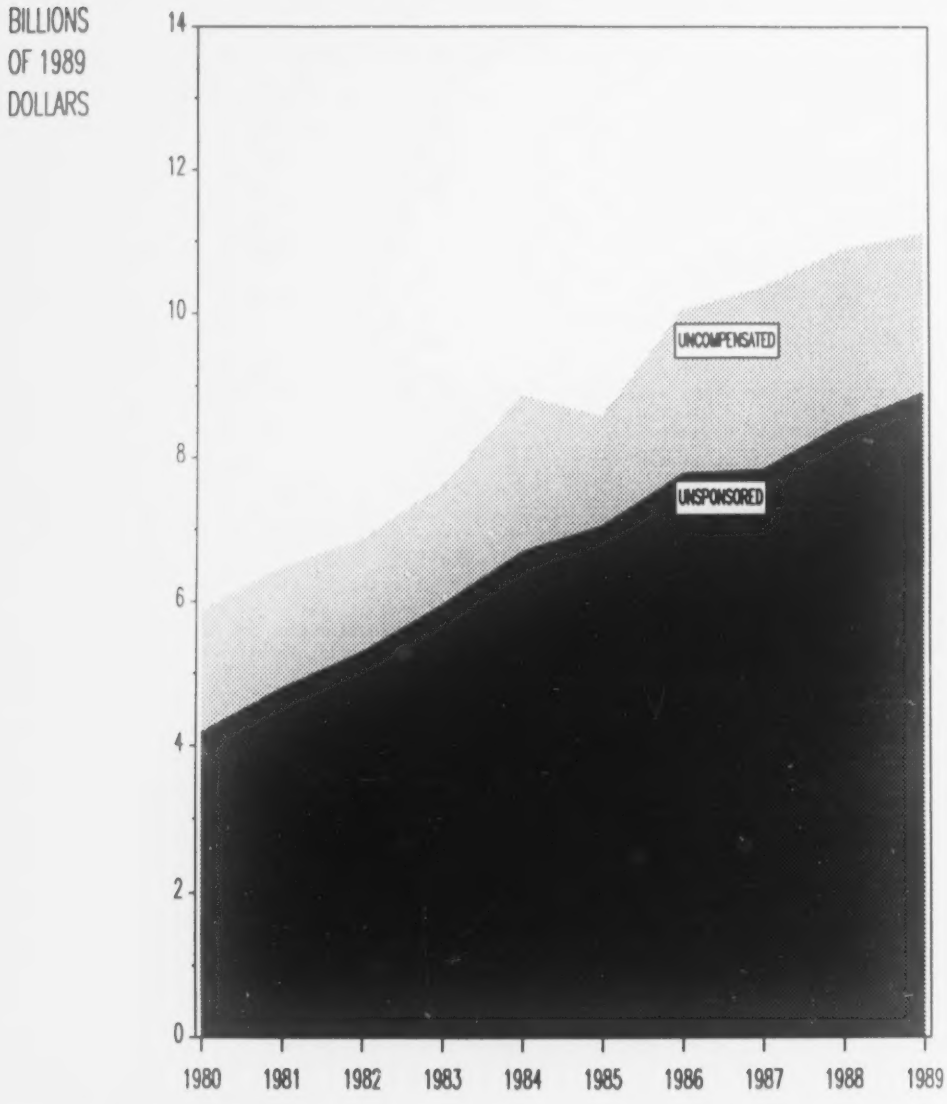


Source: CRS analysis of 1986 National Hlth. Interview Survey

Figure 56: Real Uncompensated and Unsponsored Care Provided by Hospitals, 1980-1989

The amount of uncompensated care -- the cost of bad debt and charity care provided by hospitals -- has been rising during the 1980s, from $5.9 billion (in 1989 dollars) to $11.1 billion between 1980 and 1989. At the same time, "unsponsored" care -- the costs of uncompensated care that are not offset by payments from State and local governments -- grew from $4.2 billion to $8.9 billion. Unsponsored care rose more rapidly than uncompensated care, because only 20 percent of uncompensated care was offset by State and local governments in 1988, compared to 28 percent in 1980.

FIGURE 56. REAL UNCOMPENSATED AND UNSPONSORED CARE PROVIDED BY HOSPITALS, 1980–1989



SOURCE: Congressional Budget Office calculations based on tabulations from American Hospital Association, Uncompensated and Unsponsored Hospital Care, 1980–1989: A Fact Sheet Update (AHA forthcoming, 1991).

NOTES: Uncompensated care is the estimated cost of bad debt and charity care to the hospital. It is calculated for each hospital by multiplying the portion of the difference between total charges (gross patient revenue) and payments (net patient revenue) attributable to bad debt and charity care, by the hospital's ratio of total expenses to total gross patient and other operating revenues.

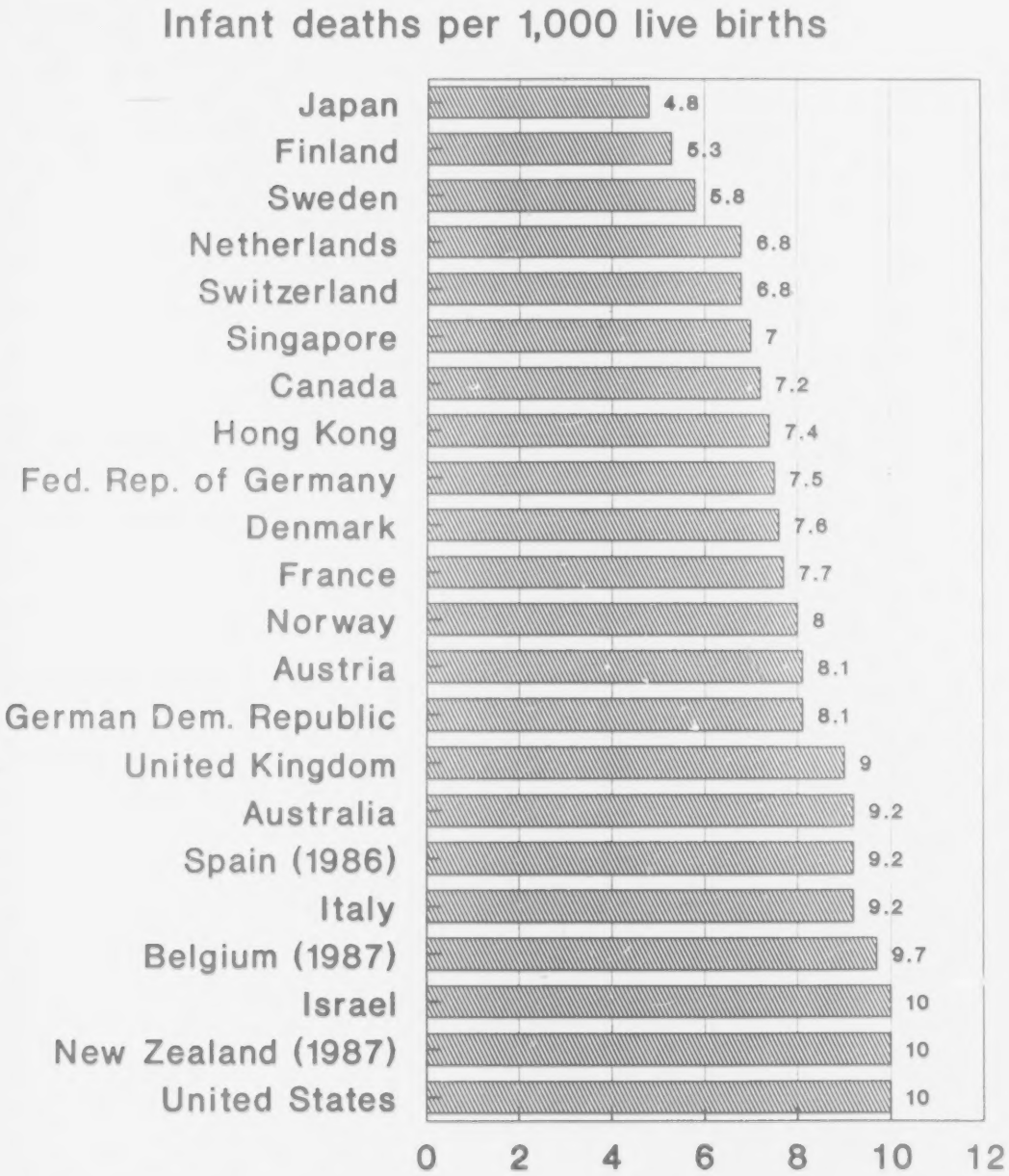
Unsponsored care is equal to uncompensated care minus hospitals' revenues from state and local governmental tax appropriations.

All data are presented in 1989 dollars, using the GNP fixed-weighted deflator.

Figure 57: Infant Mortality Rates in Selected Countries, 1988

The infant mortality rate in the United States -- the ratio of deaths in the first year of life to live births -- is higher than in many other developed nations and even some not classed as developed by the United Nations, such as Singapore and Hong Kong. In the United States, mortality rates are even higher for black infants: 17.9 infant deaths per thousand live births in 1987, as opposed to 8.6 per thousand for white infants.

Figure 57: Infant Mortality Rates in Selected Countries, 1988

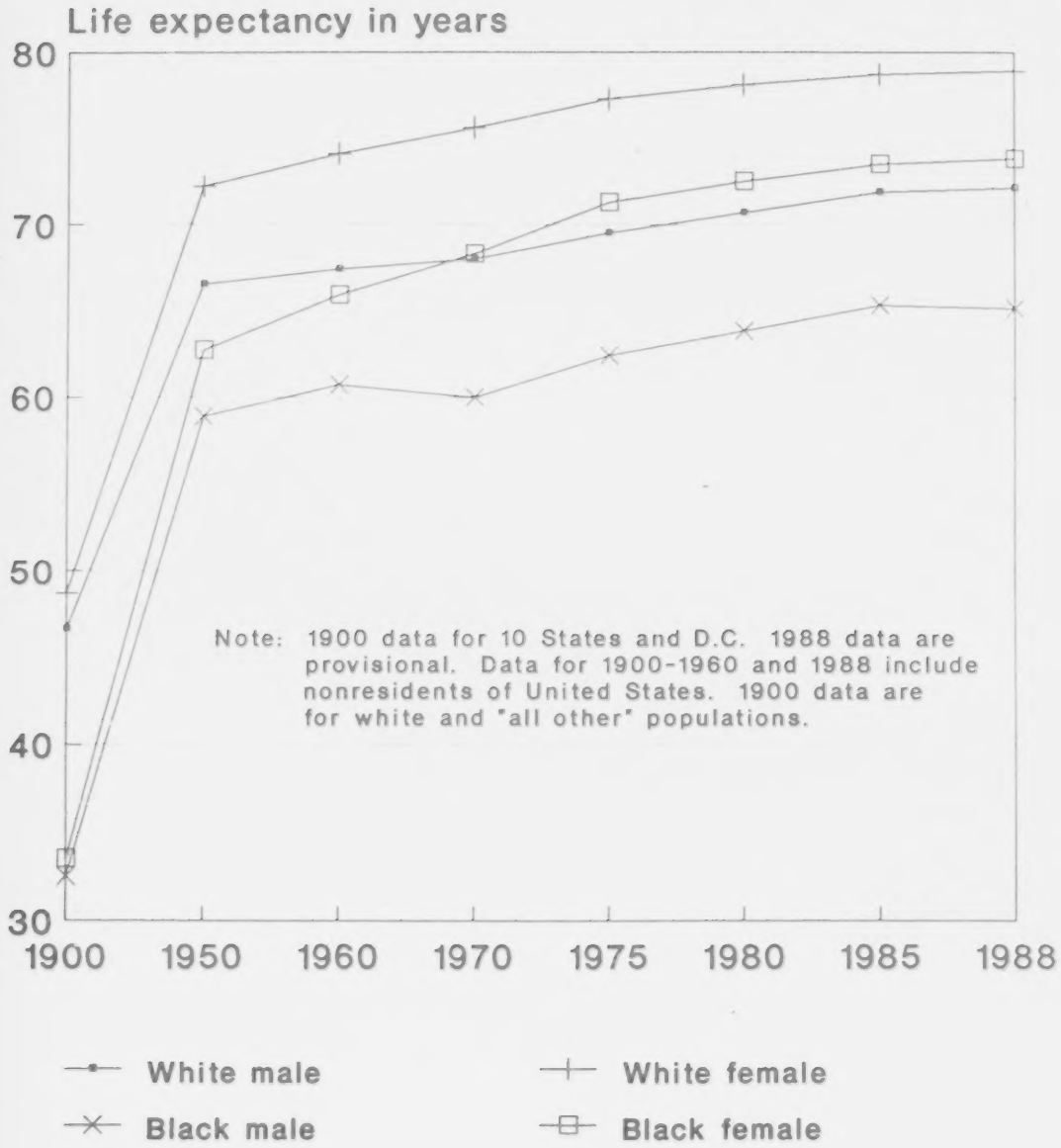


Source: National Commission to Prevent Infant Mortality based on data from United Nations Statistical Office.

Figure 58: Life Expectancy at Birth by Race and Sex, U.S., 1900-1988

Average life expectancy at birth in the United States has risen dramatically during the twentieth century, from 47.3 years for persons born in 1900 to an estimated 74.9 years for persons born in 1988. Most of the gain occurred in the years before 1950. While life expectancy has risen for all groups, black females still have a shorter life expectancy than white females, and the difference between black and white males is even greater. Life expectancy for black males actually dropped slightly in the late 1980s, from a peak of 65.4 years in 1983 to an estimated 65.1 years in 1988.

Figure 58: Life Expectancy at Birth by Race and Sex, U.S., 1900-1988

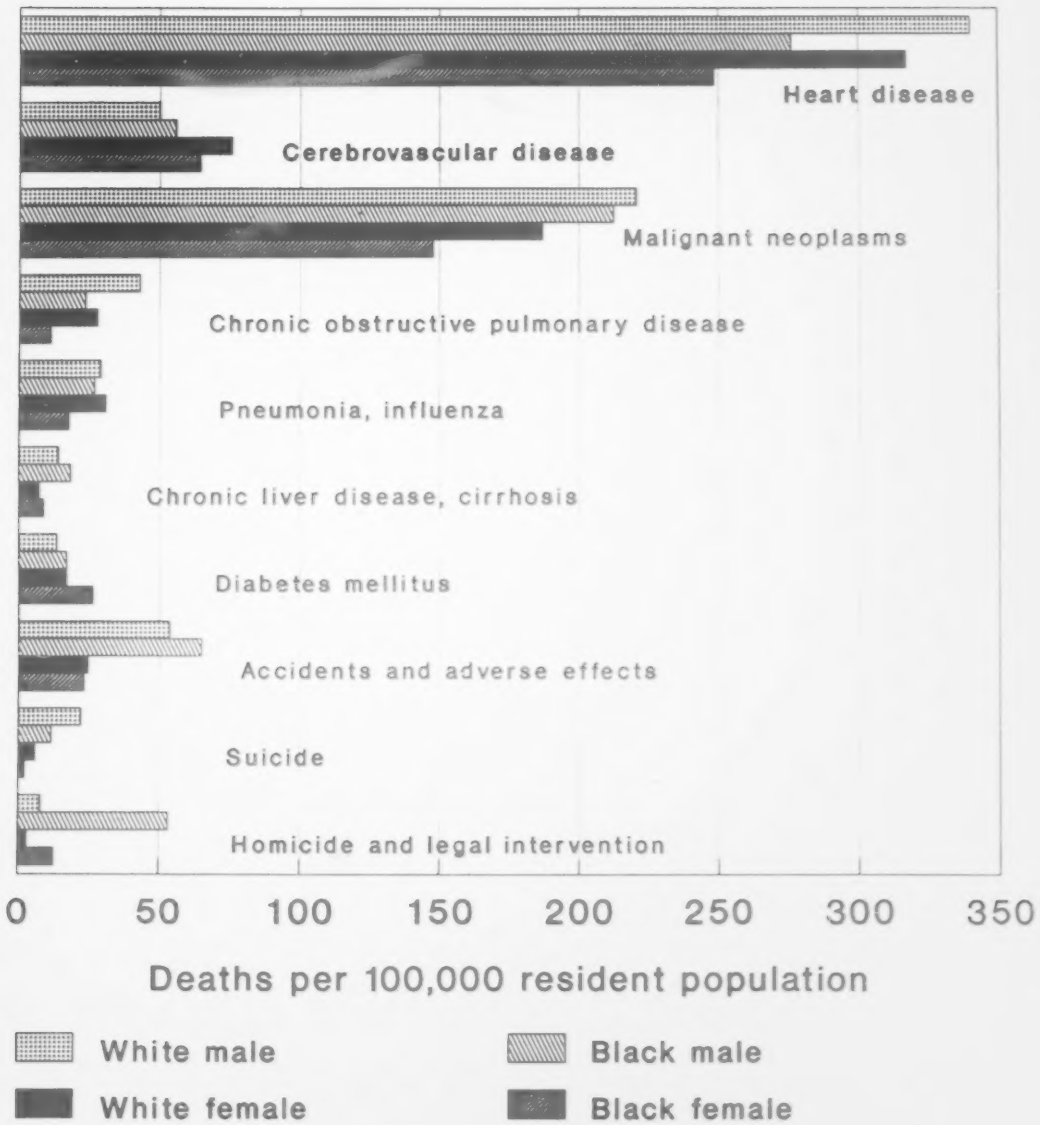


Source: U.S. Public Health Service, Health United States, 1989.

Figure 59: Death Rates for Selected Causes of Death by Race and Sex, 1987

In 1987, heart disease and malignant neoplasms were the leading causes of death for both males and females and both blacks and whites. Other causes of death vary somewhat by race and sex. For example, males are more likely to die in accidents than of cerebrovascular disease. Blacks of both sexes are more likely to be victims of homicide or "legal intervention" (such as injuries inflicted by police) than are whites. For black males, this was the fifth leading cause, as opposed to twelfth for the population as a whole. National data on causes of death for the Hispanic population are not available. Sample data from 26 States and the District of Columbia indicate that homicide, HIV disease, and certain conditions arising in the perinatal period are more important causes of death for this population than for non-Hispanic whites.

Figure 59: Death Rates for Selected Causes of Death by Race and Sex, 1987



Source: U.S. Public Health Service, Health United States, 1989

Table 1. Selected Measures of National Health Expenditures

National health expenditures increased from $249.1 billion in 1980 to $604.1 billion in 1989, growing at an average annual rate of 11.0 percent during these years. Per capita spending grew from $1,059 to $2,354 during the same period, and health spending grew from 8.6 to 11.9 of the GNP.

Table 1. Selected Measures of National Health Expenditures, 1980 - 1989

Year	National health expenditures (in billions)	Annual percent change	National health expenditures (in billions of constant 1989 dollars)	Annual percent change	Health spending per capita	Annual percent change	Health spending as a percent of GNP
1980	$249,054		$374,593		$1,059		8.6%
1981	288,554	15.9%	397,107	6.0%	1,215	14.7%	9.1
1982	323,792	12.2	419,311	5.6	1,349	11.1	9.5
1983	356,114	10.0	443,004	5.7	1,469	8.9	10.2
1984	386,995	8.7	462,750	4.5	1,582	7.6	10.5
1985	420,058	8.5	486,126	5.1	1,700	7.5	10.3
1986	452,294	7.7	509,766	4.9	1,813	6.6	10.7
1987	492,498	8.9	536,404	5.2	1,955	7.8	10.9
1988	543,994	10.5	568,581	6.0	2,139	9.4	11.2
1989	604,134	11.1	604,134	6.3	2,354	10.0	11.6
Average Annual Change:							
1980-85	34,201	11.0	22,307	5.4	128.20	9.9	
1985-89	46,019	9.5	29,502	5.6	163.50	8.5	

Source: CRS estimates based on data obtained from the Office of the Actuary, Health Care Financing Administration (HCFA).

Table 2. Trends in the Hospital Market, 1965-1989

The number of hospitals declined from 1965 to 1989. The American Hospital Association reported there were 7,123 registered hospitals in the United States; by 1989, the number had declined 5.7 percent to 6,720. While there were eight hospital beds per 1,000 population in 1965, by 1989, there were only five.

The use of hospital services changed during this period. Hospital admission rates rose from 140 per population in 1965 to a high of 170 in 1980, but declined rapidly between 1980 and 1988 to a low of 130 per 1,000 population in the latter year. Overall, the drop in the number of hospital beds was not sufficient to offset the decline in admissions. As a result, occupancy rates fell from 82 percent in 1965 to 69 percent in 1988. Occupancy rates rose very slightly in 1989. Staffing per bed and per admission, however, rose over this period.

TABLE 2. TRENDS IN THE HOSPITAL MARKET, 1965-1988

Year	Number of Hospitals	Hospital Beds		Admissions		Occupancy [a] (Percent)	Staffing	
		Total (Thousands)	Per 1,000 Population	Total (Thousands)	Per 1,000 Population		FTEs/ Bed [b]	FTEs/ Admission [b]
1965	7,123	1,704	8	28,812	140	82.3	1.1	.07
1970	7,123	1,616	8	31,759	150	80.3	1.6	.08
1971	7,097	1,556	7	32,664	150	79.5	1.7	.08
1972	7,061	1,550	7	33,265	150	78.0	1.7	.08
1973	7,123	1,535	7	34,352	160	77.5	1.8	.08
1974	7,174	1,513	7	35,506	160	77.2	1.9	.08
1975	7,156	1,466	7	36,157	160	76.7	2.1	.08
1976	7,082	1,434	6	36,776	160	76.0	2.2	.08
1977	7,099	1,407	6	37,060	160	75.8	2.3	.09
1978	7,015	1,381	6	37,243	160	75.5	2.4	.09
1979	6,988	1,372	6	37,802	160	76.1	2.5	.09
1980	6,965	1,365	6	38,892	170	77.7	2.6	.09
1981	6,933	1,362	6	39,169	160	77.9	2.7	.09
1982	6,915	1,360	6	39,095	160	77.4	2.8	.10
1983	6,888	1,350	6	38,887	160	76.1	2.7	.10
1984	6,872	1,339	6	37,938	160	72.5	2.7	.10
1985	6,872	1,318	5	36,304	150	69.0	2.8	.10
1986	6,841	1,290	5	35,219	140	68.4	2.8	.10
1987	6,821	1,267	5	34,439	140	68.9	3.0	.11
1988	6,780	1,248	5	34,107	130	69.2	3.1	.11
1989	6,720	1,226	5	33,742	130	69.6	3.2	.12

SOURCE: Congressional Budget Office using data from the American Hospital Association, *Hospital Statistics, 1989-1990* (Chicago, Illinois, 1989).

NOTE: Data refer to all AHA-registered hospitals in the United States including community hospitals, federal hospitals, long-term care hospitals, and psychiatric and other specialty hospitals.

a. Occupancy is the average daily census in all hospitals divided by the number of beds in all hospitals, expressed as a percentage. Thus, it is a measure of aggregate utilization, not a hospital-weighted measure of average occupancy.

b. FTEs are full-time equivalent staff.